FILE NOTATIONS

Entered In N I D File ✓ | Checked by Chief ✓
Entered On S R Sheet ✓ | Copy N I D to Field Office ✓
Location Map Pinned ✓ | Approval Letter ✓
Card Indexed ✓ | Disapproval Letter
I W R for State or Fee Land

COMPLETION DATA:

Date Well Completed 9-4-58 | Location Inspected
OW ✓ WW TA | Bond released State of Fee Land
GW OS PA

LOGS FILED

Driller's Log 10-3-58
Electric Logs (No.) 1
E I E-I GR GR-N Micro
Lat Mi-L Sonic Others Radiation

Re-work

FILE NOTATIONS

Entered In N I D File ✓ | Checked by Chief PMB
Entered On S R Sheet ✓ | Copy N I D to Field Office ✓
Location Map Pinned ✓ | Approval Letter In Unit
Card Indexed ✓ | Disapproval Letter
I W R for State or Fee Land

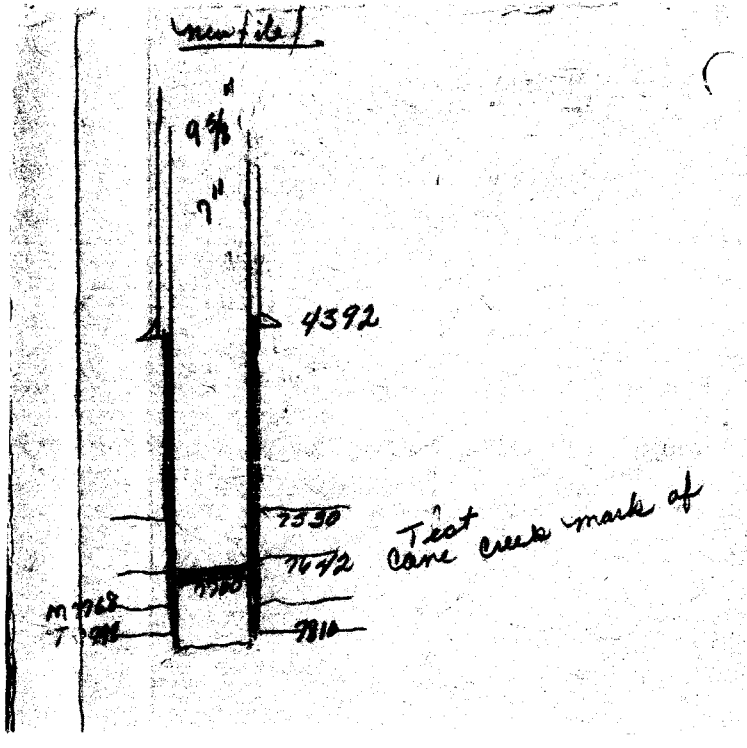
COMPLETION DATA:

Date Well Completed 10-3-62 | Location Inspected
OW WW TA | Bond released State of Fee Land
GW OS PA ✓

LOGS FILED

Driller's Log Completion Report
Electric Logs (No.)
E I E-I GR GR-N Micro
Lat Mi-L Sonic Others

Subsequent Report of Abandonment



Ellen Ruth is now the
Operator of the Big Six Unit
taken over from Cure.

WOODCO

New & Used Oil Field Equipment

P. O. Box 51 KIMBALL, NEBRASKA

W. M. "WALT" WOODS
R. L. POUNDSTONE
A. T. SKAER

January 7, 1957.

King Oil Company
Suite 315 Hess Bldg.
28 West 2nd South
Salt Lake City 1, Utah

Attention: Mr. Ilan L. Jacobs, Sec'y-Treas.

Dear Mr. Jacobs:

In accordance with our letter of October 10 and the U. S. Geological Survey Lease No. 011663, dated August 3, the pulling of the casing and the plugging of Well No. 2, King, has been complied with as indicated on the approved abandonment of this well. The location has been duly marked by a stub of four inch line pipe sticking out of the top cement plug, approximately four feet with a welder running a bead in writing on all pertinent information required by the U.S. G.S.

We are returning herewith your Logs and Temperature Survey on this location.

Please be advised that we pulled 3,240 feet of seven inch casing and 1,840 feet of ten and three-quarter inch casing.

If you know of any other wells for salvage, or if you can help us in any way, we shall appreciate it.

Very truly yours,

WOODCO PIPE & SUPPLY CO.

By Walter M. Woods
Walter M. Woods

WMW/ln
CC A.T.Skaer

orm OGCC-1 (SUBMIT IN DUPLICATE) LAND:

V

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION
STATE CAPITOL BUILDING
SALT LAKE CITY 14, UTAH

Fee and Patented ☐
State ☐
Lease No. .....
Public Domain ☒
Lease No. SLC 067043
Indian ☐
Lease No. .....

SUNDRY NOTICES AND REPORTS ON WELLS

Notice of Intention to Drill	X	Subsequent Report of Water Shut-off	
Notice of Intention to Change Plans		Subsequent Report of Altering Casing	
Notice of Intention to Redrill or Repair		Subsequent Report of Redrilling or Repair	
Notice of Intention to Pull or Alter Casing		Supplementary Well History	
Notice of Intention to Abandon Well			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

May 27, 1958

Pure-Big Flat Unit
Well No. 2 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of Sec. 14

SW¼ NE¼ Sec. 14 (¼ Sec. and Sec. No.) 26-S (Twp.) 19-E (Range) Salt Lake (Meridian)

Big Flat (Field) Grand (County or Subdivision) Utah (State or Territory)

The elevation of the ground above sea level is 6105 feet. Ungraded.

A drilling and plugging bond has been filed with U. S. Government.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important work, surface formation, and date anticipate spudding-in.)

The approximate casing program is as follows:

50' - 20" OD Conductor pipe cemented to surface.
650' - 13-3/8" OD Surface Casing cemented to surface.
9-5/8" OD Intermediate String if necessary to shut off water.
7" OD Oil String, if necessary.

Estimated Total Depth - 8,000'.

Principle Objective - Mississippian.

I understand that this plan of work must receive approval in writing by the Commission before operations may be commenced.

Company The Pure Oil Company

Address 1700 Broadway

Denver 2, Colorado

By T. L. Warburton

Title Division Chief Production Clerk

INSTRUCTIONS: A plat or map must be attached to this form showing the location of all leases, property lines, drilling and producing wells, within an area of sufficient size so that the Commission may determine whether the location of the well conforms to applicable rules, regulations and orders.

Form 24 P100—Poco—15M—11-3-43

THE PURE OIL COMPANY
LOCATION REPORT

Date May 27, 1958 November 22, 1957 A.F.E. No. 219

Division Rocky Mtn. Prod. District Big Flat Lease U.S.A. (Salt Lake 067043) Pure-Big Flat Unit

Acres 800 (1276.28 Pt.) Lease No. 7399 Elevation 6105 ungraded Well No. 2 (Serial No.)

Quadrangle SENE Sec. 14 Twp. 26-S Rge. 19-E Blk. Dist. Twp.

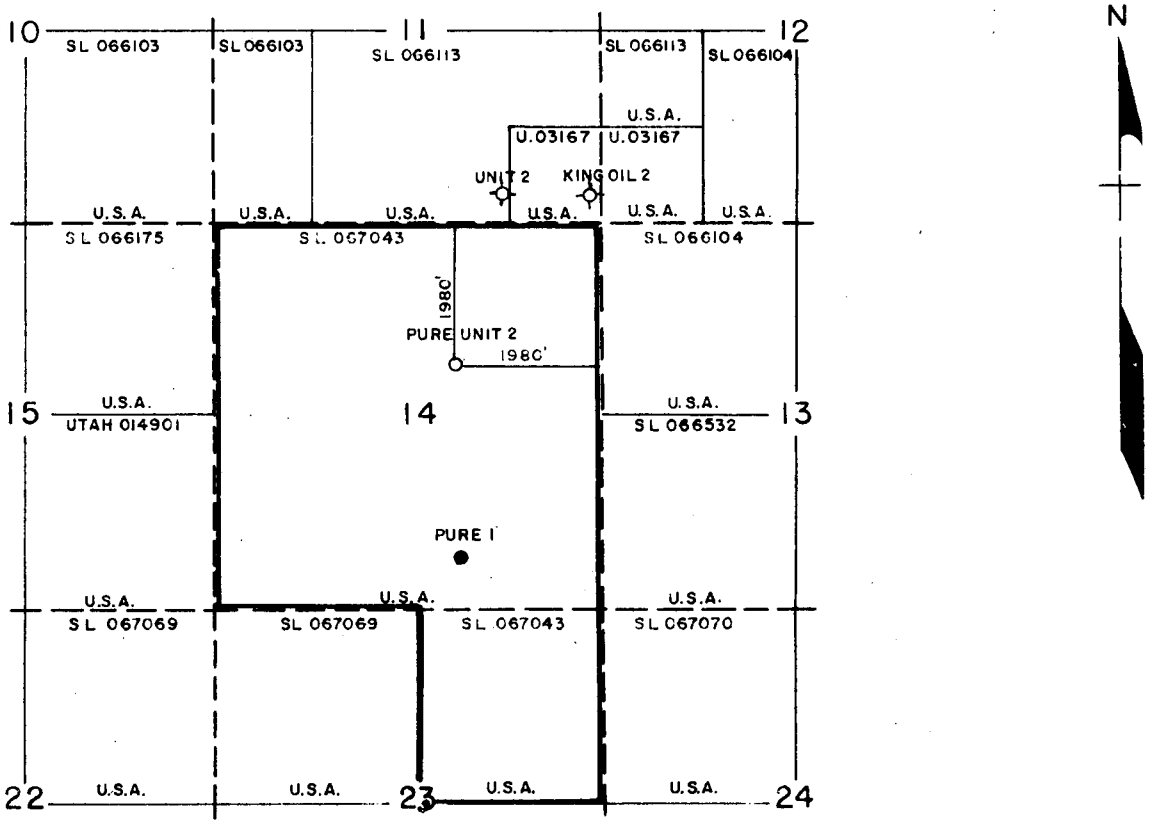
Survey Salt Lake Meridian County Grand State Utah

Operator The Pure Oil Company Map

	Feet from	North Line of Lease
	" "	East " " "
	" "	South " " "
	" "	West " " "
1,980	Feet from	North Line of Section
1,980	" "	East " " "
3,300	" "	South " " "
3,300	" "	West " " "

LEGEND

- Location
- Gas Well
- Oil Well
- Gas - Distillate Well
- Dry Hole
- Dry Showing Oil
- Dry Showing Gas
- Abandoned Location
- Abandoned Gas Well
- Abandoned Oil Well
- Input Well



NOTE:
ALL LEASES ARE PURE ET AL

Scale 2" = 1 MILE

Remarks: Section 14 unsurveyed. Location 7260' West and 1980' South of surveyed Northwest corner Section 18, Township 26 South, Range 20 East.

Submitted by Civil Engineer

Approved by Division M

Approved by Vice-President General M

SUPPLEMENTAL UNIT PLAN OF DEVELOPMENT 1968

Well Plan - Big Flat #2

(1) Rig up unit, and go in hole to determine nature of obstruction at approximately 4,800'.

(2) To clear obstruction, if any, and clean out to top of bridge plug set just above Mississippian perforations at an approximate depth of 7,740'.

(3) Set squeeze tool above Cane Creek perforations and test casing to 2500#. Reset squeeze tool and squeeze Cane Creek perforations.

(4) Drill out cement, test Cane Creek perforations and drill Mississippian bridge plug.

(5) Swab Mississippian perforations, acidize with small volume of acid if necessary, and put well on production.

Shoran

BIG FLAT OPERATIONS - April 9th through May 9th, 1968

4/9 - Rigged up and pulled tubing. Salted up, had to work the first 125' out of hole (found 1st joint split approximately 2' from bottom of joint). String wet, tubing plugged. Set Kobe @ #3 and water tank and 1-5/8" drill pipe. WO verification of collapsed casing on #2. Rig up on #3 to wash tubing while we wash salt out of tubing and move it to #2.

4/10 - Moving tubing from #1 to #2. Rig up on #3. Washed down tubing w/1-5/8 drill pipe 10 jts., got flow from bottom. Swabbed well for 3 hours. Last run fluid @ 3500'. Ran swab to 4000'. SD, rig down. Have 75 jts of 2-7/8 tbg. on #2 location.

4/11 - Rig Up and ran in hole. Hit collapsed csg. @ 4671' KB. could not turn tbg. with any weight on it. Called Halliburton to P & A. All of tubing from #1 is on #2 (2-7/8") OOH and laid down drill collars.

4/12 - No. 2 well - Ran in hole w/2-7/8 tbg. open ended, drill collars and cross over taken out (56.43'). Picked up 2 jts. (61.17'), tagged bottom @ 4671.9 + .9' . LD 1 jt. & cmtd. w/50 sacks neat cmt. Rigged down from #2. Rigged up on #3 - ran in 18 jts. of 1-5/8 drill pipe down annulus, hit salt @ approx. 530'.

4/13 - Washing down annulus w/1-5/8" drill pipe, fresh water w/Kobe rigged up pump and pit. Have in 59 jts., approx. 1770'. Hit salt bridge @ 700'?

4/14 - GIH w/1-5/8" drill pipe to 3470'.

4/15 - Washed down to 3560' . DP plugged. POOH, 2nd joint from bottom plugged w/ salt. Laid down 5 bad joints. Back in hole to 3200', circulated 3 hrs. Rigged up Aztec Pump.

4/16 - Washed down to 3900' , salt.

4/17 - Washed down to 4500'. Last 120' almost solid salt.

4/18 - Repaired Aztec Pump and hooked up mud hopper while we circulated hole. Hole made some salt last night, rigged up and pulled on tbg. to 80,000 - no movement. Washed down w/1-5/8" drill pipe to 4700' - salt. Kobe pumping slow all night.

4/19 - Washed down to 5130'. Stopped on top of 4-1/2" liner. Circulated hole clean (8.8# water) Last 600' hard salt.

4/20 - Pulled out of hole and laid down 1-5/ 8" drill pipe. Swabbed tbg. until it was clear.

4/21 - Worked tubing. Ran in McCullough to set plug. Could not get below 5001' Ran sinker bar and spudded it. Could not get it to go below 5050'. Worked tubing to 80,000#. Made manual back-off, pulled 162 jts. of 2-7/8" tbg. and 1 jt. of 2-3/8".
(162 jts 2-7/8" = 5068.92' and 1 jt. 2-3/8" = 30.81')
Made up wash pipe 340' w/Jars and 2 collars.

4/22 - Finished going in hole. Could not get over fish. Pulled out of hole.

4/23 - WIH w/overshot. While circulating salt out of hole 2-1/2" nipple parted and dropped tbg. about 7'. Fished tubg. up into bottom of blowout preventer and put in a new nipple. Circulated salt out of hole 3-1/2 hrs. Went over fish w/overshot and caught same, ran sinker bar in hole to 5050'. SD for day. Tubing and annulus full of fresh water. Getting ready to swab tubing so we can get McCullough down hole.

4/24 - Swabbed well for 3 hrs., fluid down to 4000', but could not get flow from tub ing. Hit obstruction @ 5050'. Took 2 impressions - looks like a 1-1/2 or 1-5/8 piece of collar or pipe slightly egg shaped. Backed off manually 2 jts. above overshot. Went back in hole and released overshot and came out of hole. Took impression w/a 5-1/2 impression block run on sand line, shows collar 2-3/8" slightly off center of hole. Fish down the hole again. No flow from tubing / Talked to Rodney Smith and advised him we were going to advise t he Group the best thing to do was to move to #1 as soon as talked to Ron Stanger and advised him the odds were too great to try to wash over and complete #3. That the safest way was to whipstock or drill new hole.

4/25 - Impossible to get inside tubing (can't catch flying fish). Laid down wash pipe & collars and tubing, took off blowout preventer and flanged up well. Rigged down, move to #1.
Rigged up on #1 and put on BOP. WO Brown Oil Tool to get scab liner out of hole. Rip Herman should be here in the morning. Moving tubing to #1.

4/26 - Finished rigging up and ran in Brown Oil Tool cutter, and Land & Marine spear, 2 drill collars, bumper sub, jars and 121 jts. of 2-7/8" tbg. Flowing heavy salt water w/salt crystals.

4/27 - Finished going in hole to 20' above liner. Circulated in reverse after swabbing the tubing to get it unstopped. Could not get to top of liner because of salt. POOH and closed well in for night. Mud to be on location in the morning. (Snowed and blowed 4")

4/28 - Mud on location, but busted mud pump. SD for day, another pump due here tonight.

4/29 - Mixed pit of mud (13.6#) and pumped it in hole. Did not have enough.

4/30 - Mixed 1/2 pit of mud and circulated hole. Went in w/Brown Oil Tool and caught liner. Jarred on liner four times - would not move. Released csg. steer and cut liner. Started out of hole, ran out of diesel on mud pump and could not keep hole full.

5/1 - Ran in hole and cut liner and jarred it loose. Pulled liner, laid it down.

5/2 - Broke down tools and set cement retainer @ 6233'. Pumping in 50 sacks salt cement, cement @ 3800# PSI. Set cement retainer @ 5988.75'. When this one was set the oil and gas flow stopped. Swabbing.

5/3 - Set cement retainer @ 5930'. Squeezed perforations from 5960 - 5980.75' w/75 sacks. PD 4 PM @ 3200# PSI.

5/4 - Rig up to drill plug, will start drilling tomorrow morning.

5/5 - Decided to run packer if the cement plug leaked. Drilling on EZ drill plug @ 5960'.

5/6 - Drilling on plug. Made trip for new bit.

5/7 - Finished drilling top plug and drilled 2nd plug @ 5988.75'. Bottom 15' drilled easy. Come out of hole, laid down 2 drill collars.

5/8 - Went in hole w/Baker retrievable production packer, set @ 6020', w/2" perforated mud anchor on bottom. Broke disc in tubing. Hole filled up to top of tubing, but did not flow. Swabbed, tried to flow, but perforations plugged off on swabbed down.

5/9 - Trucks on location to load equipment. Tubing full of fluid, swabbed down to 4000'. Pumped in 500 gals. 15% MCR, followed w/fresh water. Packer failed. Pressure on annulus at start 400#, went to 1800#, put away all acid and 24 bbls. of water, SD and released that 12:00.

Form 9-331 a
(Feb. 1951)

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

Land Office Salt Lake City
Lease No. SLC 067043
Unit Big Flat

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

11-K
6-27

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	X
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

June 26, 19 58

Pure-Big Flat Unit
Well No. 2 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 14

SW¼ NE¼, Sec. 14 (¼ Sec. and Sec. No.) | 26-S (Twp.) | 19-E (Range) | Salt Lake (Meridian)

Big Flat (Field) | Grand (County or Subdivision) | Utah (State or Territory)

The elevation of the ~~derrick floor~~ ground above sea level is 6103 ft.
KB elevation is 6114 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Spudded 6-7-58

Set 20" OD 94# H-40 R-1 & 2 conductor pipe at 23', cemented to surface.

June 10, 1958

Set 13-3/8" OD 48# H-E J-55 R-1 & 2 casing at 665', cemented with 600 sx 50-50 Pozmix.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company The Pure Oil Company

Address 1700 Broadway

Denver 2, Colorado

By T. L. Warburton

Title Division Chief Production Clerk

GPO 9 16 507

Form 9-331a
(Feb. 1951)

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Salt Lake City
Lease No. SLC 067043
Unit Big Flat

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	X
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

July 22, 1958

Pure-Big Flat Unit
Well No. 2 is located 1980 ft. from {N / ~~S~~} line and 1980 ft. from {E / ~~W~~} line of sec. 14

SW¼ NW¼, Sec. 14 (¼ Sec. and Sec. No.) | 26-S (Twp.) | 19-E (Range) | Salt Lake (Meridian)

Big Flat (Field) | Grand (County or Subdivision) | Utah (State or Territory)

The elevation of the ~~derrick~~ ground floor above sea level is 6103 ft.
KB elevation is 6114 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

SEE ATTACHED SHEET

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company The Pure Oil Company

Address 1700 Broadway

Denver 2, Colorado

By T. L. Warburton

Title Division Chief Production Clerk

W 1

GPO 9 18 507

Form 9-331a
(Feb. 1951)

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

Land Office Salt Lake City
Lease No. SLC 067043
Unit Big Flat

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
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NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	X
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

July 22, 1958

Pure-Big Flat Unit
Well No. 2 is located 1980 ft. from [N] line and 1980 ft. from [E] line of sec. 14

SW¼ NE¼, Sec. 14 (¼ Sec. and Sec. No.) | 26-S (Twp.) | 19-E (Range) | Salt Lake (Meridian)

Big Flat (Field) | Grand (County or Subdivision) | Utah (State or Territory)

The elevation of the ground floor above sea level is 6103 ft.
KB elevation is 6114 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

Set 9-5/8" OD 40# and 36# J-55 8-R R-2 casing at 4392', cemented with 500 sx. 50-50 Pozmix.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company The Pure Oil Company

Address 1700 Broadway

Denver 2, Colorado

By T. L. Warburton

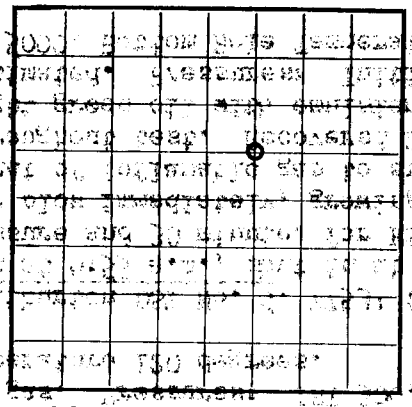
Title Division Chief Production Clerk

GPO 9 18 507

Form 9-330

Budget Bureau No. 42-R355.4.
Approval expires 12-31-60.

U. S. LAND OFFICE Salt Lake City
SERIAL NUMBER 067043
LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company The Pure Oil Company Address 1700 Broadway - Denver 2, Colorado
Lessor or Tract U. S. Government Field Big Flat State Utah
Pure-Big Flat Unit
Well No. 2 Sec. 14 T. 26S R. 19E Meridian Salt Lake County Grand
Location 1980 ft. {N./S.} of N Line and 1980 ft. {E./W.} of E Line of SW¼ NE¼ Elevation KB 6114' Gr. 6103'
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed

Date September 29, 1958 Title Division Chief Production Clerk

The summary on this page is for the condition of the well at above date.

Commenced drilling June 7, 1958 Finished drilling July 29, 1958

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 7750' to 7762' No. 4, from to
No. 2, from 7768' to 7780' No. 5, from to
No. 3, from 7788' to 7797' No. 6, from to

IMPORTANT WATER SANDS

No. 1, from None to No. 3, from to
No. 2, from to No. 4, from to

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
20"	94#	8-V	SS	23'	Coupling				Conductor pipe
13-3/8"	48#	8-R	SS	665'	Float				Cemented to surface.
9-5/8"	36#, 40#	8-R	SS	4392'	Float		7750'	7762'	"
7"	23#, 26#	8-R	NSS	7810'	Float		7768'	7780'	Production
5"	15#	8-R	NSS	3255'	Texas Pattern	(Swung)	7788'	7797'	

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
20"	23'	Cemented to surface	Halliburton		
13-3/8"	665'	600 sx	Halliburton		
9-5/8"	4392'	500 sx	Halliburton		
7"	7810'	550 sx	Halliburton		
5"	3255'	(Swung)			

FOLD | MARK

PLUGS AND ADAPTERS

Heaving plug—Material Length Depth set
Adapters—Material Size

SHOOTING RECORD

20"	23'	Cemented to surface	Halliburton		
13-3/8"	665'	600 sx	Halliburton		
9-5/8"	4392'	500 sx	Halliburton		
7"	7810'	550 sx	Halliburton		
5"	3255'	(Swung)			

FOLD | MARK

PLUGS AND ADAPTERS

Heaving plug—Material ..... Length ..... Depth set .....

Adapters—Material ..... Size .....

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out

TOOLS USED

Rotary tools were used from zero feet to 7810 feet, and from ..... feet to ..... feet

Cable tools were used from ..... feet to ..... feet, and from ..... feet to ..... feet

DATES

September 5, 1958 Put to producing September 4, 1958

The production for the first 24 hours was 119 barrels of fluid of which 100 % was oil; ..... % emulsion; ..... % water; and ..... % sediment.

Gravity, °Bé. 40.3

If gas well, cu. ft. per 24 hours ..... Gallons gasoline per 1,000 cu. ft. of gas .....

Rock pressure, lbs. per sq. in. .....

EMPLOYEES

....., Driller ....., Driller

....., Driller ....., Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
-0-	168'	168'	Surface.
168'	675'	507'	Shale.
675'	2030'	1355'	Sand and shale.
2030'	2890'	860'	Sand, shale and lime.
2890'	3046'	156'	Lime and sand.
3046'	3235'	189'	Lime and shale.
3235'	3691'	456'	Shale, sand and lime.
3691'	3838'	147'	Lime.
3838'	4129'	291'	Lime and anhydrite.
4129'	4310'	181'	Limestone.
4310'	4417'	107'	Limestone and salt.
4417'	4502'	85'	Salt and shale.
4502'	4978'	476'	Salt, shale and anhydrite.
4978'	5078'	100'	Salt, anhydrite, dolomite and shale.
5078'	5805'	727'	Salt and anhydrite.
5805'	5861'	56'	Core No. 1 - See reverse side.
5861'	6143'	282'	Salt, anhydrite and shale.
6143'	6221'	78'	Shale and anhydrite.
6221'	6257'	36'	Core No. 2 - See reverse side.
6257'	6280'	23'	Shale and anhydrite.
6280'	6306'	26'	Core No. 3 - See reverse side.
6306'	6590'	284'	Salt, shale and anhydrite.
6590'	6606'	16'	Salt.
6606'	6664'	58'	Core No. 4 - See reverse side.
6664'	6722'	58'	Core No. 5 - See reverse side.
6722'	6732'	10'	Core No. 6 - See reverse side.

[OVER]

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION
6732'	6740'	8'	Salt and shale.
6740'	7039'	299'	Salt.
7039'	7190'	151'	Anhydrite and shale.
7190'	7378'	188'	Salt, anhydrite and shale.
7378'	7527'	149'	Anhydrite and shale.
7527'	7574'	47'	Limestone, anhydrite and shale.
7574'	7624'	50'	Shale, dolomite and salt.
7624'	7666'	42'	Shale and anhydrite.
7666'	7697'	31'	Shale, anhydrite and dolomite.
7697'	7704'	7'	Dolomite and limestone.
7704'	7752'	48'	Core No. 7 - See below.
7752'	7810'	58'	Core No. 8 - See below.
		7810'	TOTAL DEPTH

Core No. 1 5805' to 5861' Cut 56' Rec. 56'

19' - Salt.
1' - Anhydrite.
7' - Gray to black anhydritic shale.
26' - Gray dolomitic anhydritic shale with partings of black shale and veins of salt.
3' - Anhydrite with black shale partings.

Core No. 2 6221' to 6257' Cut 36' Rec. 32-1/2'

8' - Anhydrite, gray, dense, with few shale partings.
3' - Shale, black, carbonaceous on 30 to 35° dip, (6230½' to 6231½' - odor on fresh break, good fluor. on bedding planes.) Lost 1' between 6229½' to 6231½'.
8' - Shale, gray, very soft, vertical fractures, salt filled, (6232½' to 6236' - interbedded salt and shale.)
17' - Salt, light brown to clear, very coarse. (Lost 2-1/2' from 6246' to 6252'.)

Core No. 3 6280' to 6306' Cut 26' Rec. 26'

1' - Anhydrite, gray, shaly.
5' - Shale, gray, anhydritic, thin shale breaks, bleds of salt, odor on break 6283' to 6284'.
9.5' - Shale, black, carbonaceous, salt, anhydritic, grading into gray shale, anhydrite grading into anhydritic salt, occasional vertical fractures, salt filled, no show.
5.5' - Black shale, carbonaceous, fissle, good odor on fresh breaks, light blue to dull fluor., vertical fractures, hairline, salt filled, fluor. along fractures.
3' - Anhydrite, gray, with black shale partings.
2' - Salt, clear, coarse, crumbly, spotted fluor., looked wet.

Core No. 4 6606' to 6664' Cut 58' Rec. 54-1/2'

54-1/2' - Xlyn salt with shale partings, no show.

Core No. 5 6664' to 6722' Cut 58' Rec. 28'

28' - Xlyn salt with shale partings, no show.

Core No. 6 6722' to 6732' Cut 10' Rec. -0-

No recovery. Mud started to flow.

Core No. 7 7704' to 7752' Cut 48' Rec. 48'

1' - Shale, black.
2' - Dolomite, gray.
2' - Shale, black to gray dolomite.
6' - Dolomite, gray with anhydrite inclusions.
2' - Limestone, gray to brown.

Core No. 6 6722' to 6732' Cut 10' Rec. -0-

No recovery. Mud started to flow.

Core No. 7 7704' to 7752' Cut 48' Rec. 48'

1' - Shale, black.
2' - Dolomite, gray.
2' - Shale, black to gray dolomite.
6' - Dolomite, gray with anhydrite inclusions.
2' - Limestone, gray to brown.
5.5' - Limestone as above, bleeding oil with strong H_2S odor.
20.5' - Limestone, tan, mottled pink and gray with many hairline random fractures, bleeding oil.
9' - Limestone, gray, with few hairline random fractures, bleeding oil.

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

Core No. 8 7752' to 7810' Cut 58' Rec. 58'

8' - Limestone, gray, mottled gray and tan, numerous random fractures and few small vugs, bleeding oil.
3' - As above, very few fractures, no vugs, no oil.
22' - Limestone as above with numerous random fractures and few small vugs, bleeding green oil.
2' - Limestone as above , no oil.
23' - Limestone as above, bleeding oil.

Halliburton DST No. 1, 4954' to 5027', 73'. 5/8" choke on bottom. Tool open one hour, shut in 30 minutes. Weak blow at start, increased to fair blow in 2 minutes, strong blow in 4 minutes and continued for 25 minutes, decreased to weak blow in 30 minutes. Recovered 92' muddy salt water. Pressures: Initial Shut In 2785, IF 50, FF 50, S.I. 50, FH 2750

Halliburton DST No. 2, 6288' to 6306'. Tool open one hour, shut in thirty minutes. Very light initial puff, then nothing. Recovered 5' drilling mud. Pressures: IF 20, FF 20, Shut In 20, IH 4670, FH 4650.

Halliburton DST No. 3, 6668' to 6740'. 6-3/4" Halliburton Double Packers set in core hole - bottom packer at 6668'. Tool open at 1:45 p.m., very weak blow, died in 30 minutes. Closed at 3:15 p.m. for bottom hole pressure for 30 minutes. Pulled loose at 3:45 p.m. Recovered 20' drilling mud. Pressures: IH 5050, IF 20, FF 20, SIP 20, FH 5020. Bottom Hole Temperature 78 degrees.

Halliburton DST No. 4, Double Packers, bottom packer at 7714'. Testing zone 7714' to 7752', 38'. Tool on bottom at 3:25 p.m. Shut in 30 minutes for Bottom Hole Pressures. Tool open at 3:55 p.m. Fairly strong blow immediately from bottom of 5 gallon bucket of water through 1/2" hose, continued throughout test. No gas to surface. Tool shut in at 5:25 p.m. Recovered 50' slightly gas cut and very slight oil cut drilling mud, trace of H_2S gas. Pressures: ISI 300, IF 20, FF 20, FSI 100, IH 5285, FH 5260. Bottom Hole Temperature 120 degrees.

Halliburton DST No. 5, 7753' to 7810'. Tool open at 6:55 a.m., shut in at 8:55 a.m. Tool open at 6:55 a.m., shut in at 8:55 a.m. Tool open 2 hours, shut in 30 minutes for Initial Pressure and 30 minutes for Final Pressure. 3/4" choke on bottom, one inch choke on top. Fair blow immediately, growing steadily stronger to strong blow in 8 minutes. Small amount of inflamable gas to surface in 33 minutes, estimated 35 to 50 MCF. Continued throughout test. Recovered 2330' fluid; 920' gas cut light green oil and 1410' gas cut light green oil with emulsion, possibly drilling mud. Emulsion varied from 10% to 50%, estimated. Pressures: Initial SI 2600, IF 200, FF 775, Final SI 2600, IH 5050, FH 5000, Bottom Hole Temperature 118 degrees.

FORM C-330

SUNDRY NOTICES AND REPORTS ON WELLS

Notice of Intention to Rework
Pure-Big Flat Unit No. 2
1980' FNL & 1980' FEL
Sec. 14, T-26S, R-19E
Grand County, Utah

Salt Lake City
SLC 067043
Big Flat
August 14, 1962

Our Big Flat Unit No. 2 well was originally completed in the Mississippian Formation in August, 1958, through casing perforations from 7,768' to 7,780' and from 7,788' to 7,798'.

Pumping equipment was installed and the well was placed on production on September 3, 1958. The well produced 6,423 barrels of oil through October, 1959. During the thirteen month period the well was produced, considerable trouble was encountered with paraffin and parting of the pumping rods thereby making it uneconomical to operate the well.

The well has 7" casing set at 7,810' and cemented with 550 sacks of 50% Pozmix and 50% Neat cement. That should be a sufficient volume of cement to jacket the outside of the 7" casing from 7,810' back to the shoe of the intermediate 9-5/8" casing which is set at 4,392'.

We request permission to plug off the bottom part of the well and test the Cane Creek Zone which was encountered at a depth of 7,530' to 7,642' in the basal part of the Paradox Section.

Our proposed rework procedure is to be as follows:

(1) Set a permanent bridge plug in the 7" casing at approximately 7,700'.

(2) Perforate the Cane Creek Zone from 7,550' to 7,620' and test.

(3) If the zone proves productive in paying quantities it will be produced.

(4) If zone is not productive well is to be plugged and abandoned.

THE PURE OIL COMPANY

BIG FLAT UNIT NO.2

C SW NE Sec. 14, T. 26S., R. 19E.
1980 from north line; 1980 from east line
Grand County, Utah

SPUDDED: June 7, 1958
COMPLETED: September 5, 1958

SAMPLE ANALYSIS BY: M. W. Merrell and V. O. Gustafson

FORMATION TOPS

Formation	Sample	Gamma Ray-Neutron
Jurassic		
Kayenta	Spuds	Spuds
Wingate		526
Triassic		657
Chinle	655	657
Moenkopi	989	988
Permian	1478	1474
Cutler	1478	1474
Rico	2250	2200
Pennsylvanian	2780?	2755
Hermosa	2780?	2755
Upper Hermosa	2780?	2755
Paradox		4297
Salt	4555	4552
Base Salt	7526	7526
Mississippian	7705	7705

PURE-BIG FLAT UNIT No. 2
SW¼ NE¼, Section 14, T-26S, R-19E
Grand County, Utah

July 2, 1958

Halliburton DST No. 1, 4954-5027, 73 feet. 5/8" choke on bottom. Tool open one hour, shut in 30 mins. weak blow at start, increased to fair blow in 2 mins., strong blow in 4 mins. and continued for 25 mins., decreased to weak blow in 30 mins. Recovered 92 feet muddy salt water. Pressures: Initial shut in 2785, IF 50, FF 50, S.I. 50, FH 2750.

July 12, 1958

Halliburton DST No. 2, 6288 to 6306. Tool open one hour, shut in thirty minutes. Very light initial puff, then nothing. Recovered 5' drilling mud. Pressures: IF 20, FF 20, Shut in 20, IH 4670, FH 4650.

July 16, 1958

Halliburton DST No. 3, 6668 to 6740, Hydro Spring Tester. 6-3/4" Double Packers set in core hole - bottom packer at 6668. Tool open at 1.45 PM - very weak blow, died in 30 minutes. Closed at 3.15 PM for bottom hole pressure - 30 mins. Pulled loose at 3.45 PM. Recovered 20 feet drilling mud. Pressures: IH 5050, IF 20, FF 20, SIP 20, FH 5020. Bottom Hole Temperature 78 degrees.

W/

500 - 610 Sandstone, white to orange, fine grain, very slightly calcareous, sub-angular to well rounded; very slight gray-green shale.

610 - 620 As above, very slightly micaceous.

620 - 630 As above.

630 - 640 As above; and siltstone, brown to maroon.

640 - 650 Siltstone, brown to maroon; slightly arenaceous, w/rounded quartz grains, very slightly calcareous.

650 - 660 Siltstone, brown to maroon, slightly arenaceous, very slightly calcareous.

660 - 670 Same as above.

670 - 675 As above.

	Air pressure	Weight	RPM
200-215	95	16,000	95
215-255	95	16,000	100
255-455	95	20,000	120
455-500	95	20,000	70
500-675	95	20,000	66

675 - 695 Siltstone, arenaceous, brown to maroon, very slightly calcareous.

695 - 700 As above; little shale, gray-green.

700 - 710 As above; some shale, gray, green.

710 - 720 As above; little shale, gray-green.

720 - 730 As above; little shale, gray-green.

730 - 740 As above; little shale, gray-green.

740 - 750 Sandstone, tan to pink, fine grain, sub-angular to well rounded; trace light green shale.

750 - 760 Siltstone, arenaceous, light brown; w/some green to gray-green shale.

760 - 770 As above; except not arenaceous.

770 - 780 As above.

780 - 790 Siltstone, light blue-green, very fine grain, angular to subrounded, calcareous; some gray-green shale.

790 - 800 As above, trace orange to light brown sand grains.

800 - 820 As above.

820 - 880 Siltstone, tan to greenish, very fine grain, subangular to subrounded; little green-blue shale, slightly calcareous.

880 - 910 As above; w/trace black shale w/conchoidal fracture.

910 - 960 As above; no black shale.

960 - 970 As above; w/trace black shale.

970 - 980 Siltstone, light blue-green, angular to subrounded, well sorted; little blue-green shale; trace black shale, slightly calcareous.

980 - 990 Same as above and some brown siltstone and shale.

990 - 1000 Siltstone, light buff to brown, calcareous; some blue-green shale.

1000 - 1080 Silty shale, reddish brown; trace gray shale.

1080 - 1090 No sample.

1090 - 1100 Siltstone, sandy shale, reddish brown w/trace gray shale. Sample appears to be damp and has slump matter from uphole.

Moenkopi 988'

1100 - 1110 Silty shale, reddish brown; some gray shale,

1110 - 1120 As above.

1120 - 1250 Silty shale, reddish brown; little gray shale, slightly calcareous.

1250 - 1260 As above; some gray-green shale.

1260 - 1270 Shale, red-brown, silty, calcareous, and shale, gray, very slightly calcareous.

1270 - 1510 Shale, reddish brown, silty, calcareous; little gray shale.

	Air pressure	Weight	RPM
675-690		14,000	65
690-750		18,000	70
750-850		18,000	80
850-890	65	25,000	80
890-940	75	25,000	80
940-1130	70	25,000	80
1130-1510	75	25,000	80

Chinle 835' Datum +5479
Moenkopi 988' Datum +5126

1510 - 1530 Silty shale, brown to red-brown, calcareous; little gray shale.

1530 - 1540 No sample.

1540 - 1550 As above.

1550 - 1560 No sample.

1560 - 1420 Shaley siltstone, reddish brown, trace light brown w/rounded quarts grains; some brownish gray shale, trace micaceous, calcareous.

1420 - 1460 As above, some light brown w/rounded quarts grains.

1460 - 1470 Shaley siltstone, reddish brown, calcareous, micaceous, little w/rounded quarts grains; little gray-green shale.

1470 - 1480 As above, and sandstone, fine grain, white to light tan, subangular to well rounded.

1480 - 1500 Sandstone, light tan, slightly calcareous, subangular to well rounded, white quarts grains predominant w/some orange stain quarts, fine grain, to very fine grain.

1500 - 1510 As above, and siltstone, light brown, medium to fine grain; w/chocolate brown shale, some white quarts grains.

1510 - 1520 Siltstone, light brown, medium to fine grained, calcareous, fine grain, little white quarts grain, angular to subangular; little chocolate brown shale.

1520 - 1530 As above, w/only trace white quarts and trace chocolate brown shale.

1530 - 1540 As above - damp balled sample w/light blue shale (Chinle) from above.

1540 - 1550 Silty sandstone, light brown, white and light brown, subangular to subrounded quarts grains; little chocolate brown shale (slightly damp sample w/ball brown shale).

1550 - 1560 Sandy siltstone, light brown, very fine grain, angular to subrounded sand grains (quarts); little light tan limestone.

1560 - 1570 Siltstone, light brown, calcareous, very fine grain; trace sandstone; trace grey limestone; trace shale, light green and black.

1570 - 1580 As above, no black shale.

1580 - 1590 As above.

1590 - 1600 Shale, light brown, calcareous, silty w/few rounded quarts grains.

1600 - 1610 As above.

1610 - 1620 Sandstone, pink to light brown, very arkosic, very shaley, fine to coarse grain, rounded to subangular.

1620 - 1630 Siltstone, light brown, calcareous, slightly sandy, slightly arkosic, micaceous.

1630 - 1640 As above.

1640 - 1650 Sandstone, arkosic, light brown, shaley, fine to coarse grain, subangular to subrounded, calcareous.

1650 - 1660 As above.

1660 - 1670 As above, fine grain.

1670 - 1690 As above.

1690 - 1780 Siltstone, light brown, arkosic, very micaceous, calcareous, shaley?.

1780 - 1790 Siltstone, light brown, calcareous, sandy, micaceous, slightly arkosic.

1790 - 1810 Sandstone, light brown, arkosic, calcareous, fine to coarse, micaceous.

1810 - 1940 Siltstone, light brown, calcareous, very fine grain, sandy, shaley, slightly arkosic, micaceous.

1940 - 1910 Sandstone, light brown, arkosic, fine to coarse grain, calcareous, subangular to sub-rounded, micaceous.

1910 - 1950 Sandstone, light brown, arkosic, fine to coarse grain, calcareous, angular to subrounded, micaceous, trace chlorite?.

1950 - 2000 As above, getting silty.

	Air pressure	Weight	RPM
1320-1600	75	25,000	85
1600-1620	70	25,000	80
1620-1960	70	25,000	90
1960-2000	70	25,000	90

Cutler White Rim 1478' /4836

2000 - 2010 Siltstone, tan to light brown, sandy, calcareous, micaceous, arkosic.

2010 - 2020 Sandstone, light brown, fine grain, angular to subrounded, calcareous, micaceous; trace green chlorite, arkosic.

2020 - 2050 Siltstone, light brown, sandy, calcareous, micaceous; w/trace chlorite, arkosic.

2050 - 2080 Sandstone, light brown, arkosic, calcareous, very fine grain, angular to subrounded, micaceous.

2080 - 2090 Siltstone, light brown, sandy, arkosic, calcareous, micaceous.

2090 - 2100 As above, w/trace chlorite.

2100 - 2110 As above.

2110 - 2130 As above, increase micaceous.

2130 - 2150 As above, very micaceous.

2150 - 2170 Siltstone, light brown, sandy, calcareous, micaceous, arkosic.

2170 - 2190 As above; sample appears to be slightly damp w/some balling.

2190 - 2230 Sandstone, silty, arkosic, light brown, calcareous, micaceous, angular to subrounded.

2230 - 2240 Limestone, light tan, sandy, micaceous, quartz fragments, angular to subrounded.

2240 - 2250 As above, less sandy.

2250 - 2260 Siltstone, light red to brown, arkosic, very calcareous, micaceous, sandy.

2260 - 2270 As above - color light brown and very sandy.

2270 - 2280 Sandstone, light brown to gray, fine to very fine grain, angular to subangular, arkosic, calcareous, micaceous (biotite also).

2280 - 2290 As above - color light tan.

2290 - 2300 Shaley sandstone, gray, angular to subrounded, calcareous; little dark gray shale; trace green micaceous shale, micaceous.

2300 - 2310 Sandstone, light brown to maroon, arkosic, micaceous w/biotite, fine to very fine grain, angular to subrounded, calcareous.

2310 - 2320 Silty sandstone, very little purple, arkosic, calcareous, micaceous w/biotite, angular to subrounded.

2320 - 2330 As above - finer grained.

2330 - 2340 No sample.

2340 - 2360 Siltstone, orange-brown, arkosic, calcareous, micaceous, angular to subrounded.

2360 - 2380 Sandstone, light brown, arkosic, calcareous, micaceous, angular to subrounded.

2380 - 2390 As above, more micaceous (including biotite).

2390 - 2400 No sample.

2400 - 2410 As above, coarser fragments, damp sample.

2410 - 2420 As above, fine fragments, damp sample.

2420 - 2430 As above - not damp.

2430 - 2450 Sandy siltstone, light red to brown, arkosic, calcareous, micaceous, w/biotite; trace light gray-green, micaceous shale.

2450 - 2460 Sandy siltstone, light red-brown, arkosic, calcareous, micaceous, no biotite; trace light green shale.

2460 - 2470 Sandstone, light orange-brown, arkosic, calcareous, micaceous, w/biotite, angular to subrounded fragments; trace balls of bentonitic shale (possible cavings from uphole).

2470 - 2480 No sample.

2480 - 2500 Sandstone, light orange-brown, arkosic, calcareous, micaceous, w/biotite; little dark brownish, purple shale.

	Air pressure	Weight	RPM
2000-2060	75	25,000	80
2060-2220	70	25,000	80
2220-2370	90	25,000	75
2370-2440	100	30,000	88
2440-2500	100	30,000	84

Shafer 2250' #3884

2500 - 2510 Sandstone, light red to brown, arkosic, calcareous, micaceous, subangular to well rounded (mostly well rounded), medium to fine grain.

2510 - 2520 As above - but silty and more abundant biotite.

2520 - 2530 As above - less biotite.

2530 - 2540 As above.

2540 - 2560 Sandstone, light red-brown, arkosic, calcareous, micaceous, subangular to subrounded, coarse to fine grain.

2560 - 2570 As above, fine grain and more abundant biotite.

2570 - 2580 Sandstone, as above, very coarse to medium grain.

2580 - 2590 As above, medium to fine grain.

2590 - 2600 As above, including biotite.

2600 - 2610 Sandstone, light red-brown, arkosic, calcareous, micaceous, medium to fine grain, subangular to subrounded; trace light brown shale; trace blue-green shale.

2610 - 2620 As above; trace white limestone.

2620 - 2650 As above.

2650 - 2660 Sandstone, light red-brown, arkosic, calcareous, micaceous, fine, medium to fine grain, subangular to subrounded; some dark gray dense limestone.

2660 - 2670 As above; trace salt crystals.

2670 - 2680 Sandstone, red-brown, coarse sand, arkosic, calcareous, micaceous, subangular to subrounded. (Sample @ approximately 2675')

2680 - 2690 As above; little shale, green, micaceous, dense, slightly calcareous, and shale, brown, micaceous, dense, slightly calcareous. (Sample @ approximately 2680-85 very small).

2690 - 2730 No sample.

2730 - 2740 Shale, gray-blue, dense, trace micaceous; some shale, brown, slightly calcareous, dense.

	Air pressure	Weight	RPM
2500-2600	100	30,000	85
2600-2650	100	30,000	80
2650 - 2670	100	25,000	80
2710-2730	200	15,000	75
2730-2740	235	15,000	75

2740 - 2750 Shale, gray-green, very slightly calcareous; some maroon shale; trace sandstone, micaceous.

2750 - 2760 Sandstone, gray and white peppered, calcareous, coarse to fine grain, angular to subangular, arkosic, abundant feldspar, no micaceous; little to some gray shale.

2760 - 2780 Sandstone, light brown, fine grain, angular to subrounded, calcareous; little gray shale.

2780 - 2790 Sandstone, light gray, calcareous, medium to fine grain, micaceous, angular to subrounded; trace maroon micaceous shale; trace light gray limestone; light gray shale.

2790 - 2800 Sandstone, tan, as above; no limestone; some gray shale.

2800 - 2810 Sandstone, light gray, calcareous, coarse to medium grain, angular to subrounded, micaceous; little gray and maroon shale; little gray limestone.

2810 - 2820 Shale, light gray, calcareous, sandy, trace micaceous; little maroon shale; little gray limestone.

2820 - 2830 As above.

2830 - 2840 Sandstone, light tan, calcareous, micaceous, medium to fine grain, angular to subrounded; little gray shale; little gray limestone.

2840 - 2850 As above; little maroon shale.

Hermosa 2780' -5334

	Air pressure	Weight	RPM
2740-2800	250	15,000	75
2800-2840	250	38,000	98
2840-2850	175	38,000	98

2850 - 2860 Sandstone, brownish gray, arkosic, calcareous, micaceous, medium to fine grain, subangular to subrounded; some gray-green shale; trace chocolate brown shale; little light gray limestone.

2860 - 2870 Sandstone, gray to brown, coarse to medium grain, angular to subangular, arkosic, calcareous, micaceous; little gray limestone; some green shale, very micaceous; little brown, micaceous shale; trace salt crystals.

2870 - 2880 As above, medium to fine grain.

2880 - 2890 As above, no salt crystals.

2890 - 2900 Sandstone, light brown, medium to fine grain, angular to subrounded, arkosic, calcareous, micaceous; little grey-green shale; trace light grey limestone.

2900 - 2910 As above; inclusions gray-green micaceous shale and light gray limestone.

2910 - 2920 Shale, gray-green, slightly calcareous, micaceous; some light tan limestone; some light brown sandstone, fine grain.

2920 - 2940 As above, except shale, chocolate brown, micaceous.

2940 - 2950 Sandstone, gray, medium to fine gray, subangular to subrounded, calcareous, arkosic, micaceous; little gray-green micaceous shale; little gray limestone.

2950 - 2960 Sandstone, as above; and light gray-green, micaceous shale (large pieces that may be cave material).

2960 - 2970 Shale, chocolate brown and gray-green, micaceous, very slightly calcareous; some light gray limestone; some sandstone, orange to green, fine grain, calcareous, very micaceous (large pieces).

2970 - 2980 As above; sandstone, coarse grain; trace honey brown chert, (large pieces).

2980 - 2990 Sandstone, gray to light brown, fine to medium grain, angular to subrounded, calcareous, arkosic, micaceous; little light gray limestone; some gray-green shale.

2990 - 3000 Sandstone, grey, medium grain, subangular to subrounded, calcareous; some light gray limestone.

	Air pressure	Weight	RPM
2850-3000	120/220	56,000	66

3000 - 3020 Sandstone, light gray, very calcareous, micaceous, arkosic, coarse to fine grain, angular to subrounded; some light gray to white limestone; some grey and gray-green shale.

3020 - 3040 As above, getting more limy.

3040 - 3060 Limestone, light tan, micaceous, sandy; some green shale; trace maroon shale (sample very finely groundup).

3060 - 3090 As above, very sandy.

3090 - 3100 As above, decrease sand.

3100 - 3120 Limestone, light gray, slightly micaceous, sandy; some green-gray shale; little maroon, micaceous shale.

3120 - 3150 As above; more sand and shale inclusions probably from cavings.

3150 - 3150 Sandstone, white to light tan, very calcareous, medium to fine grain, subangular to subrounded; some grey limestone; little red-brown, micaceous shale; trace gray-green shale.

3150 - 3180 Sandy limestone, light grey, micaceous; trace maroon shale; trace grey shale.

3180 - 3190 As above, becoming more sandy.

3190 - 3200 Limestone, dark gray, sandy, fine to medium grain, trace micaceous; little green shale; trace maroon shale.

	Air Pressure	Weight	RPM
3000-3200	120/220	60,000	66

5200 - 5210 Limestone, dark gray, dense, micaceous, sandy, medium to fine grain, angular to subangular; little brown to maroon shale.

5210 - 5220 As above, w/cavings of brown and gray-green shale.

5220 - 5230 As above.

5230 - 5240 Limestone, dark gray, very slightly micaceous; trace light brown shale.

5240 - 5250 Shale, light gray and maroon; some dark gray limestone (cavings of shale).

5250 - 5260 Limestone, dark gray, very slightly sandy; some red shale (few cavings).

5260 - 5500 Limestone, light tan, argillaceous, very slightly silty - samples are very fine powder.

5500 - 5510 No sample.

5510 - 5530 As above.

5530 - 5540 Limestone, light gray and white, little quartz, angular to subangular, medium to fine grain; some gray shale; trace red shale (some large chunks shale that are cavings).

5540 - 5550 As above (large amounts of cavings).

5550 - 5560 Limestone, light gray, arkosic, micaceous, sandy, coarse to fine grain, angular to subangular; little chocolate brown shale.

5560 - 5570 As above, getting more sandy.

5570 - 5580 Sandstone, gray, micaceous, arkosic, angular to subangular, medium to fine grain, and gray limestone.

5580 - 5590 Limestone, tan, micaceous, sandy, medium to fine grain, angular to subangular; little dark grey shale.

5590 - 5400 As above.

5400 - 5410 As above; trace bright orange chert.

5410 - 5420 As above, becoming more sandy.

5420 - 5450 Limestone, gray, slightly micaceous, sandy, medium to fine grain, angular to subangular; orange chert; some dark gray shale.

5450 - 5450 As above; trace maroon shale.

	Air pressure	Weight	RPM
5200-5240	160	50,000	60
5240-5450	200	60,000	65

3450 - 3470 Limestone, dark gray and light gray, sandy, coarse to medium grain, angular to subangular; trace orange chert; some dark gray shale, slightly calcareous, slightly micaceous (cavings maroon shale).

3470 - 3480 Limestone, light gray, dense; little dark gray limestone; little dark grey shale; trace maroon shale.

3480 - 3490 As above, sandy, fine to medium grain, angular to subangular, micaceous.

3490 - 3500 As above, no sand or micaceous.

3500 - 3510 As above; trace sand; trace orange chert.

3510 - 3520 Limestone, light tan, silty (powdered sample).

3520 - 3530 As above; little gray-green shale.

3530 - 3540 Limestone, light gray, sandy, medium grain, subangular to subrounded; little gray-green shale; little maroon shale (cavings gray and chocolate brown shale).

3540 - 3550 As above (more cavings).

3550 - 3560 As above.

3560 - 3570 Limestone, light tan, sandy, very fine to fine grain; gypsum (white, needle-like crystals); little gray and green shale.

3570 - 3590 Limestone, light gray, sandy, coarse to medium grain, subangular to subrounded, slightly micaceous; trace maroon micaceous shale; trace gray shale.

3590 - 3600 Limestone, light tan, sandy, medium to fine grain, subangular to subrounded, micaceous; little gray shale (cavings maroon shale).

3600 - 3610 Limestone, light brownish tan, sandy, medium to fine grain, subangular to subrounded, micaceous, stain of limonite common; trace gray shale.

3610 - 3620 Limestone, dark gray, slightly sandy, slightly micaceous; little red micaceous shale, trace limonite staining.

3620 - 3650 As above; trace orange chert.

3650 - 3660 As above, getting more sandy.

3660 - 3670 As above (w/cavings gray shale).

3670 - 3680 Limestone, light tan, very sandy, fine to coarse grain, angular to subangular, micaceous; some gray shale; little maroon shale, little limonite staining (cavings grey-green shale).

	Air pressure	Weight	RPM
3450-3680	200	60,000	65

5680 - 5690 No sample.

5690 - 5700 Limestone, light tan, micaceous, slightly sandy; little maroon shale; little dark gray siltstone.

5700 - 5710 Limestone, gray, slightly micaceous, sandy, medium to fine grain, subangular to subrounded; little grey shale; little red-maroon shale, sample pieces are large.

5710 - 5750 As above.

5750 - 5760 Sandstone, tan, medium to fine grain, subangular to subrounded, micaceous; some gray limestone.

5760 - 5770 As above, and gray limestone, dense.

5770 - 5780 As above.

5780 - 5810 Limestone, light grey, slightly sandy, slightly micaceous; little red, micaceous shale.

5810 - 5850 As above, dark grey to gray, large chips.

5850 - 5840 Limestone, dark gray, dense; trace black, micaceous shale.

5840 - 5870 No sample.

5870 - 5900 Limestone, light gray, sandy, medium to fine grain, angular to subangular; some dark gray, dense limestone; trace dark gray shale.

	Air pressure	Weight	R.P.M
5880-5900	200	60,000	65

5900 - 5910 Limestone, light gray, sandy, medium to fine grain, angular to subangular; some dark gray dense limestone; trace maroon shale.

5910 - 5920 As above.

5920 - 5950 As above, sand, coarse to fine grain; trace orange chert.

5950 - 5950 Limestone, gray, dense, sandy, coarse to fine grain, subangular to subrounded; trace maroon shale.

5950 - 5960 Limestone, gray, very sandy, fine to medium grain, subangular to subrounded; trace red to orange chert; trace blue-green shale.

5960 - 5980 Limestone, gray, dense (from light gray to dark gray); little dark gray shale.

5980 - 4000 Limestone, light grey, sandy, medium to fine grain; trace maroon shale; trace dark grey shale, slightly micaceous.

4000 - 4020 As above; w/trace orange chert (few cavings of shale).

	Air pressure	Weight	RPM
3900-3930	270	60,000	65
3930-3940	240	40,000	65
3940-3950	240	40,000	65
3950-3980	240	60,000	65
3980-4020	280	60,000	65

4020 - 4050 Limestone, light gray, slightly sandy, medium to fine grain, angular to subangular; some dark gray limestone; trace red shale.

4050 - 4060 As above, (shale cavings).

4060 - 4070 As above, gypsiferous.

4070 - 4090 Limestone, light gray, slightly sandy, medium to fine grain, angular to subangular; little gray-green shale; trace chocolate brown shale, very slightly micaceous.

4090 - 4100 As above; sand increasing w/both pink and transparent quartz grains.

4100 - 4110 Limestone, dark gray, dense; some limestone, light tan to light gray; trace gypsum.

4110 - 4120 Limestone, gray to tan, very sandy, medium to fine grain, angular to subrounded, gypsiferous, slightly micaceous. Sample very shaley (large chunks) from cavings.

4120 - 4130 Limestone, dark gray, slightly cherty, gypsiferous, slightly sandy.

4130 - 4140 Limestone, tan; little orange chert, gypsiferous; little green shale; little maroon-red shale (cavings of chocolate brown, calcareous shale).

4140 - 4150 As above, slightly micaceous.

4150 - 4160 As above, gray-green shale increase (no cavings - powdered sample).

4160 - 4170 As above.

	Air pressure	Weight	RPM
4020-4170	280	60,000	65

4170 - 4180 Limestone, tan, sandy, medium to fine grain, subangular to subrounded, slightly micaceous; little gypsum (anhydritic), trace pink quartz, fine to medium grain; some gray-green and chocolate brown shale (some cavings of brown and green shale).

4180 - 4190 As above; anhydrite increasing, less cavings.

4190 - 4200 Limestone, light gray to tan, sandy, pink to white quartz, medium to fine grain, subangular to subrounded; some anhydrite; little chocolate brown shale; trace black limestone, slightly micaceous (samples are almost a powder).

4200 - 4210 As above, mica decreasing.

4210 - 4230 As above, sand decreasing.

4230 - 4240 Limestone, light gray, slightly sandy, pink and clear quarts, medium to fine grain; some anhydrite; little brown shale; little gray-green shale (some cavings of calcareous shale).

4240 - 4260 Limestone, light gray and dark gray, sandy, coarse to fine grain, subangular to subrounded; some anhydrite, dirty gray, slightly micaceous (gray-green shale and some brown shale, probably cavings).

4260 - 4270 Limestone, gray; some anhydrite, light gray, sandy, medium to fine grain, subangular to subrounded, pink and clear quarts grains; little green shale; little red-brown shale.

4270 - 4290 Limestone, light gray to gray; some anhydrite, slightly sandy, coarse to fine grain, subangular to subrounded, clear and light brown quarts grains; little grey-green shale; little chocolate brown shale; little maroon, micaceous shale.

4290 - 4500 As above; shale decreasing to trace.

4500 - 4520 Limestone, gray, sandy, medium to fine grain, subangular to subrounded, clear to pink quarts grains, and light tan to gray anhydrite; trace chocolate brown shale; trace maroon, micaceous shale.

	Air pressure	Weight	RPM
4170-4320	260	60,000	65

4520 - 4550 Limestone, gray, dense; some anhydrite, light gray, slightly sandy, medium to fine grain, clear to orange quarts; little black calcareous shale; trace red shale; trace chocolate brown shale.

4550 - 4570 As above; black calcareous shale increasing to some.

4570 - 4580 Limestone, light tan to brown, very fine powder, silty.

4580 - 4410 As from 4520' to 4570'.

4410 - 4417 No sample.

NOTE: Drilling time indicated salt from 4555', no salt in samples because fresh H_2O dissolved salt. Ran water test and salt in return line had 75,000 PPM increase.

Samples from 4555' very poor w/small amounts of sediment in muddy water. Drilling w/air, preparing to run casing, depth of hole 4417'. Salt loaded up weight of water until air couldn't lift it anymore.

4417 - 4430 No returns except cement.

4430 - 4440 Shale, light brown, gray, gray-green; some anhydrite, light grey to white, dense, hard, greasy looking; gray to white chert; little red to red-brown shale.

4440 - 4450 As above; anhydrite decreasing; little black shale.

4450 - 4460 As above, poor sample.

4460 - 4470 As above; more black shale.

4470 - 4480 As above, poor sample.

4480 - 4490 Shale, brown to red-brown; anhydrite, hard, dense, gray to white; little black carbonaceous shale.

4490 - 4500 Very poor sample. Mostly gel.

4500 - 4510 As above.

4510 - 4540 Shale, light gray, calcareous; some gray anhydrite.

4540 - 4550 Shale, black, calcareous, carbonaceous.

4550 - 4560 As above; little gray anhydrite.

Ran 9-5/8" casing to 4590' w/500 sacks cement, 8-5/4" HTC, OWV bit #21 @ 4417'.

	Pump pressure	Weight	RPM
4520-4560	600	18,000	90

4560 - 4570 Shale, dark gray to black, very calcareous, carbonaceous, and silty limestone, light gray, sucrosic; little white anhydrite.

4570 - 4580 Shale, black, calcareous, carbonaceous, and light gray anhydrite, sucrosic; w/white powdered gypsum.

4580 - 4590 As above; no gypsum.

4590 - 4600 Salt, clear to white; little anhydrite and black shale.

4600 - 4650 Salt, clear, colorless.

4650 - 4660 Anhydrite, light gray to white; some salt, colorless.

4660 - 4670 As above; no salt; some black shale, calcareous, carbonaceous.

4670 - 4680 Anhydrite, light grey; trace black, calcareous shale.

4680 - 4690 As above, and salt, colorless (sample is rather gummy and stuck together).

4690 - 4700 As above; w/some black shale.

	Pump pressure	Weight	RPM
4560-4700	800	25,000	75

4700 - 4710 Shale, black, calcareous, slightly micaceous, very fissile.

4710 - 4720 As above, and light gray to tan, anhydritic limestone, very argillaceous and silty, sugary texture (almost a marl, very poorly consolidated).

4720 - 4730 Limestone, as above; some clear salt; little gray anhydrite; trace black shale.

4730 - 4740 As above.

4740 - 4750 As above; some black shale.

4750 - 4760 Anhydrite, light grey to tan, calcareous, silty, sugary texture; some black calcareous shale; some light tan anhydrite, hard, dense.

4760 - 4770 As above.

4770 - 4780 As above, and trace brown-red shale, and salt, clear.

4780 - 4790 Salt, clear.

4790 - 4810 As above; w/trace black shale.

4810 - 4820 Silty limestone, light gray, argillaceous, anhydritic; some clear salt; little black shale.

4820 - 4830 As above; w/little salt.

4830 - 4840 Silty, argillaceous limestone, as above, and black shale; little salt. Poor sample, very gummy while wet.

4840 - 4850 Salt, light gray to clear; trace black shale.

4850 - 4910 Salt, clear; trace black shale; trace light gray dolomite, anhydritic, sucrosic. Salt crystals rounded not cubic due to anhydrite content.

NOTE: Catching 5' samples from 4910-4960'.

4910 - 4930 As above.

4930 - 4960 As above.

NOTE: Catching 5' samples from 4960-5025'.

4960 - 4970 As above.

4970 - 4975 As above; w/increase of anhydrite (sample getting sticky).

4975 - 4980 As above; anhydrite, light brown, sucrosic.

4980 - 4985 Salt, clear; some anhydritic limestone, light brown, very fine grain, sucrosic; trace black shale; little anhydrite, light brown, sucrosic.

4985 - 4990 As above; salt decreasing; grey anhydrite increasing, gummy.

4990 - 4995 Anhydrite, dark grey, calcareous, fine grain, sucrosic; some salt, gummy.

4995 - 5000 As above; w/little black shale.

5000 - 5015 Anhydrite, dark gray to black, calcareous, gummy; some salt; some black shale; little salt.

5015 - 5020 Gypsum, white, soft, calcareous; little clear salt; little gray to black shale.

5020 - 5027 Gypsum, as above, and salt, clear; little black shale.

	Pump pressure	Weight	RPM
4700-4752	800	25,000	75
4752-4859	1000	30,000	80
4859-4978	900	30,000	80
4978-5027	800	20,000	80

	Mud weight	Viscosity
4926'	11.0	40
4980'	11.2	41
5018'	11.1	39

DST #1, 4964-5027', Paradox formation. Tool open 60 minutes, shut in 30 minutes, very weak blow immediately, fair blow air from bottom 5 gallon bucket after 2 minutes, strong after 4 minutes, decreased after 30 minutes, gradually decreasing to very weak at end of test. Recovered 92' slightly salt water cut mud. No shows. IFP 50, FFP 50, SIP 50, IHH 2785, FHH 2760.

5027 - 5070 Salt, white.

At 5048' - Mud weight 11.1, Vis. 40.

NOTE: Samples to 5070' have large amount of dolomite, gray, fine to sugary; gypsum and shale, black, very calcareous. This appears to be contamination from above for the most part.

5070 - 5090 As above; trace salt, orange.

At 5078' - Mud weight 11.1, Vis. 39.

5080 - 5090 As above; increase salt, orange.

5090 - 5100 Salt, mostly orange; some white.

At 5092' - Mud weight 11.1, Vis. 38.

5100 - 5120 As above.

5120 - 5150 As above; increase salt, white.

5150 - 5170 As above; salt is more gray and looks gypsiferous.

At 5148' - Mud weight 11.1, Vis. 38.

5170 - 5190 Salt, white to light orange; gypsiferous in parts.

5190 - 5200 As above; not gypsiferous.

5200 - 5210 Salt, white to gray, slight gypsiferous in parts.

5210 - 5220 As above; more gray, more gypsiferous; trace orange.

At 5214' - Mud weight 10.8, Vis. 41.

5220 - 5250 Salt, white to gray.

5250 - 5260 As above; little gypsum.

5260 - 5270 Anhydrite and gypsum, white to gray; some shale, gray to black, dolomitic and anhydritic, and little dolomite, gray, tan, anhydritic in parts, shaley in parts.

At 5266' - Mud weight 11.0, Vis. 45.

5270 - 5280 Shale, as above grading to dolomite, as above, and anhydrite, as above.

5280 - 5290 Salt, white to gray; anhydrite, as above, and dolomite, as above; little shale, black, dolomitic in parts, anhydritic in parts.

5290 - 5320 Salt, white to gray.

At 5297' - Mud weight 11.1, Vis. 36.

5320 - 5350 Salt, white to gray.

5350 - 5370 As above; slightly gypsiferous.

5370 - 5380 Gummy, very poor sample. Probably mostly gypsum grading to some gypsiferous shale and dolomite?

	Pump pressure	Weight	RPM
5027-5078	900	18,000	85
5078-5180	600	18,000	?
5180-5218	900	18,000	85
5218-5266	900	10,000	80
5266-5284	900	18,000	80
5284-5559	800	80,000	80
5559-5580	800	80,000	80

5380 - 5390 Salt, grey, anhydritic in parts.

5390 - 5400 Salt, white to grey, sypsiferous; some anhydrite, grey, and gypsum, white.

5400 - 5410 Salt, grey to clear (some black shale and brown, fine grain dolomite in sample - caving?)

5410 - 5450 Salt, white.

5450 - 5460 Salt, white; anhydrite and gypsum, white to grey, and dolomite, grey, tan, fine granular, anhydritic in parts; little shale, black, dolomitic.

At 5452' - Mud weight 11.1, Vis. 40.

5460 - 5470 Anhydrite and gypsum, white to grey; little dolomite, as above.

5470 - 5480 Dolomite, brown, gray, fine granular, anhydritic in parts, and anhydrite, white to grey and tan; little shale, black, dolomitic.

5480 - 5490 Gypsum and anhydrite, white to gray; some dolomite, as above; some shale, as above.

5490 - 5500 Salt, white; shale, black, dolomitic; anhydrite and gypsum, white to gray and tan; dolomite, as above.

At 5499' - Mud weight 11.1, Vis. 45.

5500 - 5510 Anhydrite and gypsum, as above, and salt, white; little shale, black, dolomitic.

At 5501' - Mud weight 11.1, Vis. 41.

5510 - 5530 Salt, grey.

5530 - 5560 Salt, grey.

At 5559' - Mud weight 11.1, Vis. 57.

	Pump pressure	Weight	RPM
5560-5424	800	80,000	80
5424-5472	900	80,000	80
5472-5496	900	18,000	80
5496-5560	800	20,000	80

5580 - 5570 Salt, white to gray.

5570 - 5560 Salt, as above; little gypsum, dolomitic.

At 5579' - Mud weight 11.8, Vis. 41.

5560 - 5590 Salt, as above; little gypsum and anhydrite, white to gray, dolomitic.

5590 - 5600 Salt, as above, and gypsum and anhydrite, as above.

At 5591' - Mud weight 11.7, Vis. 42.

5600 - 5610 Salt, as above; some gypsum, as above.

5610 - 5620 Anhydrite and gypsum, as above; little salt.

At 5614' - Mud weight 11.9, Vis. 45.

5620 - 5630 Anhydrite, as above; little gypsum; little dolomite; little salt.

At 5630' - Mud weight 12.2, Vis. 45.

5630 - 5640 Dolomite, gray, fine granular, anhydritic grading to anhydrite and shale, gray to black, dolomitic.

At 5637' - Mud weight 12.2, Vis. 45.

5640 - 5650 Dolomite, as above, and anhydrite, as above; little shale, as above.

5650 - 5660 Salt, white to gray, anhydritic and gypsiferous in parts; some anhydrite and/or gypsum, white to grey.

At 5652' - Mud weight 12.5, Vis. 44.

5660 - 5680 Salt, white to gray.

	Pump pressure	Weight	RPM
5560-5581	800	20,000	80
5581-6651	600	20,000	80
5651-6680	800	20/30,000	80

5680 - 5690 Salt, white to gray.

5690 - 5700 Salt, white to gray; some anhydrite and gypsum, white to grey, dolomitic in parts.

5700 - 5710 Salt, as above; some anhydrite and gypsum, as above grading to dolomite?, grey, fine granular, very anhydritic.

At 5705' - Mud weight 12.9, Vis. 52.

5710 - 5720 Salt, white; anhydrite and gypsum, white to gray; little dolomite, gray, fine granular, anhydritic.

At 5717' - Mud weight 15.1, Vis. 50.

5720 - 5730 Salt, white; some gypsum and anhydrite, as above.

5730 - 5740 Salt, white.

5740 - 5750 Salt, white; little gypsum, white, gray.

At 5748' - Mud weight 15.1, Vis. 50.

5750 - 5770 Salt, white.

At 5770' - Mud weight 15.1, Vis. 50.

5770 - 5805 As above.

	Pump pressure	Weight	RPM
5680-5701	800	20/30,000	80
5701-5805	800	30,000	80

Core #1, 5805-5861', cut 56', recovered 56'.

5805 - 5818 Salt, white to brown and gray, anhydritic in streaks.

At 5815' - Mud weight 15.2, Vis. 55.

5818 - 5819 As above; crystals up to 5/4" in this foot, also thin parting of shale, black.

5819 - 5823 As above.

5823 - 5824 Salt, as above, w/last 3" anhydrite, gray, crystalline with partings and inclusions of shale, black.

5824 - 5825 As in 9" above.

5825 - 5826 Shale, gray to black, anhydritic, dolomitic grading to dolomite, gray, argillaceous, anhydritic w/3" salt bed in middle of foot.

5826 - 5827 As above, fractured? core broken up.

5827 - 5828 Shale, gray to black, anhydritic, dolomitic, core broken up.

5828 - 5829 Shale, black, fissile, core broken up.

5829 - 5850 As above (small brachiopods in this foot), core broken up.

At 5850' - Mud weight 15.4, Vis. 49

Core #1 (con't)

5850 - 5851 As above (bedding dipping 20°).

5851 - 5852 As above.

5852 - 5854 Shale, grey, dolomitic, anhydritic grading to interbeds dolomite, grey, argillaceous, anhydritic.

5854 - 5855 As above, w/partings of shale, black and veins and veinlets of salt and anhydrite.

5855 - 5856 Shale, grey, dolomitic, anhydritic grading to interbeds of dolomite, grey, argillaceous, anhydritic w/veinlets of salt.

5856 - 5858 As above, w/carbonaceous mottle in shale; bedding dipping 5°.

5858 - 5859 Top 8" is black shale; bottom 8" is shale, grey, dolomitic, anhydritic grading to dolomite, w/salt filled vertical fractures through entire foot.

5859 - 5860 Top 4" is salt, white to brown, w/inclusions of shale, black; bottom 8" is shale, grey, dolomitic, anhydritic grading to dolomite, grey, argillaceous, anhydritic.

5860 - 5861 As 8" above.

5861 - 5865 As above.

5865 - 5864 As above (closed vertical fractures in this foot).

5864 - 5865 As above.

5865 - 5866 As above (two 3/4" salt beds dipping 5° in this foot).

5866 - 5867 As above.

5867 - 5868 As above, darker than above.

5868 - 5870 Shale, grey, dolomitic, anhydritic grading to interbeds of dolomite, grey, argillaceous, anhydritic w/partings of shale, black and veinlets of salt.

At 5869' - Mud weight 15.5, Vis. 50.

5870 - 5872 As above; no shale, black.

5872 - 5873 As above; w/partings of black shale.

5873 - 5875 Shale, grey, dolomitic, anhydritic grading to interbeds of dolomite, argillaceous, anhydritic.

5875 - 5876 As above, w/salt veinlets.

Core #1 (con't)

5856 - 5857 Shale, gray, grading to dolomite, as above w/fractures up to ½" wide, partly open, partly filled w/salt.

5857 - 5858 Shale, gray, dolomitic, anhydritic, grading to dolomite, gray, argillaceous, anhydritic w/salt veinlets.

5858 - 5859 Anhydrite, grey, argillaceous, w/black shale partings.

At 5860' - Mud weight 15.3, Vis. 55.

5859 - 5860 Anhydrite, grey, argillaceous.

5860 - 5861 Anhydrite, gray w/partings of black shale and ½" layer of salt. No shows.

	Pump pressure	Weight	RPM
5805-5850	700	10/15,000	50
5850 -5858	650	16/20,000	60
5858-5861	650	20,000	60

5861 - 5870 Anhydrite, white, soft, gummy, and salt, clear; trace gray dolomite; trace black shale (all this sample is probably cavings from above).

5870 - 5880 Anhydrite, gray to dark gray, crystalline, argillaceous; some clear salt; trace black shale.

5880 - 5890 As above; shale increasing.

5890 - 5900 Anhydrite, grey and white, soft, gummy, argillaceous; some clear salt; little black calcareous shale.

5900 - 5910 Anhydrite, gray, soft, gummy, argillaceous; some salt; trace black shale.

5910 - 5920 As above, shale increasing.

5920 - 5930 Salt, clear; some gray, argillaceous anhydrite; little black shale.

5930 - 5940 Salt, clear and light tan; little grey, argillaceous anhydrite; trace black shale; trace grey dolomite.

5940 - 5950 As above; little salt, bright orange color; anhydrite decreasing.

5950 - 5980 Salt, clear and little tan; little gray, argillaceous anhydrite; trace black shale.

5980 - 5990 As above; w/little bright orange salt (potassium salt?); anhydrite decreasing.

5990 - 6010 As above.

6010 - 6070 Salt, clear to tan, trace bright orange; trace black shale; trace argillaceous anhydrite, gray to gray-green.

At 5863' - Mud weight 13.5, Vis. 58.
5887' - Mud weight 13.1, Vis. 48.
5894' - Mud weight 13.5, Vis. 48.
5997' - Mud weight 12.8, Vis. 58.

	Pump pressure	Weight	RPM
5980-5990	900	40,000	80
5990-5990	1000	40,000	80
5990-6070	900	38,000	80

6070 - 6090 Salt, clear, tan, light orange; trace slightly calcareous shale; trace gray anhydrite; trace light gray dolomite.

6090 - 6090 As above; w/trace brown, silty limestone.

6090 - 6100 As above; no limestone.

6100 - 6110 As above.

6110 - 6120 As above; w/little anhydrite, soft, light gray, and black and white speckled argillaceous anhydrite.

6120 - 6130 Salt, as above; some gray, soft anhydrite; trace black shale.

6130 - 6140 Salt, tan to clear, and shale, black; little gray, argillaceous anhydrite.

6140 - 6150 Shale, black, very slightly calcareous; some salt, clear; some white anhydrite (gypsum?), very soft and sticky; some light gray, anhydritic dolomite.

6150 - 6160 Salt, w/some as above.

6160 - 6170 Salt, clear; little black shale; little white, soft anhydrite; trace gray anhydritic dolomite.

6170 - 6180 As above, w/white anhydrite decreasing.

6180 - 6190 As above, no white anhydrite.

6190 - 6220 Salt, as above, but clear to grey.

Depth	Mud weight	Viscosity
6143'	12.8	58
6143'	13.4	55
6143'	13.5	55
6147'	13.5	58
6215'	13.4	55

	Pump pressure	Weight	RPM
6070-6092	900	56,000	80
6092-6145	1100	40,000	80
6145-6220	900	56,000	80

Core #2, 6221-6267', cut 50', recovered 52½'.

6221 - 6222 Anhydrite, gray to dark gray, fine crystalline, very slightly dolomitic; trace black, carbonaceous shale, inclusions salt.

6222 - 6225 As above, w/salt splits (¼" thick) in black shale.

6225 - 6225 Anhydrite, gray, fine crystalline, argillaceous, slightly dolomitic, inclusions clear salt.

6225 - 6226 As above, w/very few shale partings.

6226 - 6227 As above, salt inclusions decreasing.

6227 - 6229 As above, w/some white sugary anhydrite, no salt.

6229 - 6250 Shale, black, fissile, carbonaceous, slightly dolomitic; vertical fracture thin salt filled, few interbeds orange crystal salt; dips 80-85°.

6250 - 6251 Shale, as above, from 50½-51½, good lite blue fluorescence on bedding, odor on fresh break.

NOTE: Lost 1' core between 6229½-6251½'

6251 - 6252 Shale, as above w/blebs anhydrite, salt, few inclusions (large) light gray, dense anhydrite - and shale, light gray, soft, w/veinlets orange salt, crystalline.

6252- 6256 As above, w/1" vertical fracture filled white fibrous salt from 6252½ to 6256-3/4'.

6256 - 6258 Shale, as above and light orange to light brown, very coarse crystalline salt.

6258 - 6259 Shale, gray to dark gray, very soft, w/abundant inclusions coarse salt crystals, as above.

6259 - 6240 Shale, gray, very anhydritic, clear salt inclusions, and salt, clear to light brown; w/inclusions of argillaceous anhydrite, gray to dark gray.

6240 - 6241 As above, and salt, clear, coarse crystals (up to 2"); w/shale inclusions.

6241 - 6242 Salt, as above.

6242- 6245 Salt, clear crystalline (large crystals).

Core #2 (con't)

6245 - 6246 As above; w/shale and anhydrite inclusions.

6246 - 6249 As above, inclusions decreasing.

NOTE: Lost 2' core between 6246'-6249'.

6249 - 6250 Salt, as above; some shaley anhydrite, grey, sugary.

6250 - 6251 As above, decrease in anhydrite.

6251 - 6253 Salt, clear, crystalline.

6253 - 6254 As above; w/some grey anhydrite.

6254 - 6257 Salt, clear, crystalline.

	Pump pressure	Weight	RPM
	600	20,000	80

Core #2 (General Description), 6221-6257, cut 36', recovered 32½'.
5' 6221-6229 - Anhydrite, gray, dense, w/few shale partings.
3' 6229-6232 - Shale, black, carbonaceous, fissile, dip 50°-55°, 6230½-6231½ (1') oder on fresh break, good light blue fluorescence on bedding planes.
8' 6232-6240 - Shale, grey, soft, w/1" vertical fracture, salt filled 32½-36'. Intermixed salt at base.
17' 6240-6257 - Salt, light brown to clear, very coarse.

Lost core: 1' between 6229½-31½'
2½' between 6246-52'.

At 6257' - Mud weight 15.4, Vis. 55.
At 6257' - Mud weight 15.5, Vis. 57.

6257 - 6260 Salt, clear, little gray gummy anhydrite, slightly dolomitic; little black carbonaceous shale (probably cavings of shale).

6260 - 6270 As above; salt, clear and white.

6270 - 6280 Salt, as above; little light brown-orange salt; trace black carbonaceous shale; trace gray dolomitic anhydrite.

At 6280' - Mud weight 15.5, Vis. 57.

	Pump pressure	Weight	RPM
6221-6257	900	16,000	80
6257-6280	900	56,000	90

Core #5, 6280-6306, cut 26', recovered 25'.

6280 - 6281 Anhydrite, dark gray to black, argillaceous, slightly dolomitic, few inclusions crystal salt, clear.

6281 - 6282 As above, very argillaceous; little black shale w/salt veinlets.

6282 - 6285 Anhydrite, gray, very argillaceous, slightly dolomitic, salt inclusions abundant.

6285 - 6284 As above; no shale, black.

6284 - 6286 Shale, very anhydritic, gray, few thin shale breaks, very slight odor on fresh breaks, clear salt inclusions.

6286 - 6287 As above, no odor.

6287 - 6291 Shale, black, carbonaceous, poker chip; small blebs anhydrite, occasional salt inclusions, bedding plane horizontal, soft, no shows.

6291 - 6292 As above, and very anhydritic gray shale.

6292 - 6295 Anhydrite, gray, argillaceous, inclusions of salt.

6295 - 6294 As above, very argillaceous, 1/8" shale partings, dip 30°.

6294 - 6295 Anhydrite, dark gray, very argillaceous, inclusions clear salt; some anhydrite, light tan, hard, pure.

6295 - 6296 As above, and shale, black, carbonaceous, poker chip, oder on fresh break, good light blue to dull fluorescence, w/streak gray anhydrite, bedding plane irregular, dips 0-10°, occasional vertical salt filled fracture 0-1/8".

6296 - 6297 Black shale, as above.

6297 - 6301 As above.

6301 - 6302 Anhydrite, light gray to gray, dense, vertical fracture salt and anhydrite filled, slight oder, looks wet, spotty fluorescence on fracture.

6302 - 6305 Anhydrite, dark gray; w/occasional black shale partings, no show, no oder.

6305 - 6304 As above.

6304 - 6306 Salt, clear to light tan, crystalline, coarse to very coarse, occasional fluorescence, no oder (salt is crumbly and appears to have some reservoir properties, looks wet).

NOTE: Lost core: 6" between 6288-89, 6" between 6290-91'.

	Pump pressure	Weight	RPM
6280-6306	700	20,000	60

At 6292' - Mud weight 13.5, Vis. 55.
6302' - Mud weight 13.5, Vis. 60.

DST #2, 6289' - 6306', Pennsylvanian formation. Tool open 1 hour, shut in 30 minutes. Slight puff of air, died after 4 minutes, recovered 5' salt water cut mud. Temperature survey failed (broken thermometer). IFP 20, FFP 20, SIP 20/30", IHH 4670, FHH 4650.

6306 - 6340 Salt, clear (small amount orange); little black, carbonaceous shale; trace light gray sugary dolomitic anhydrite; trace gray anhydrite (other than salt, probably cavings).

6340 - 6350 Salt, white to gray to orange; little clear salt w/fiberous appearance; little black shale; little gray dolomitic anhydrite.

6350 - 6360 Salt, clear to white w/occasional orange; trace black shale; trace gray dolomitic anhydrite.

6360 - 6380 Salt, white to tan and clear; trace gray sugary dolomitic anhydrite; trace black shale.

6380 - 6390 Salt, white to clear; trace black shale.

6390 - 6410 Salt, clear to light tan; trace black shale.

6410 - 6420 As above; w/trace gray dolomitic anhydrite.

	Pump pressure	Weight	RPM
6306-6350	1100	45,000	50
6350-6420	500	40,000	60

At 6325' - Mud weight 13.1, Vis. 54.
6365' - Mud weight 13.2, Vis. 65.

6420 - 6430 Salt, clear to light gray; trace black pyritic shale; trace hard, gray sugary dolomitic anhydrite; trace light gray, very soft, calcareous, anhydritic shale.

6430 - 6440 As above; black shale decreasing.

6440 - 6450 As above; light gray anhydrite; shale decreasing.

6450 - 6460 Salt, clear; little light orange salt; trace black carbonaceous shale; trace light gray, soft, calcareous, anhydritic shale.

6460 - 6470 As above.

6470 - 6480 Salt, as above, and gray, argillaceous, slightly dolomitic anhydritic; trace black shale.

6430 - 6500 Anhydrite, white, gummy and gray, sugary, slightly dolomitic; trace black carbonaceous shale; and salt, clear, w/little light brown to orange.

6500 - 6510 Salt, clear to light orange; trace black carbonaceous shale; trace gray, sugary dolomitic anhydrite; trace white, gummy anhydrite.

6510 - 6540 Salt, as above; trace black, carbonaceous shale; trace dark gray, sugary, dolomitic anhydrite.

6540 - 6550 As above; shale increasing; black carbonaceous shale; gray anhydritic shale; slight amount red-brown, sugary, slightly micaceous shale.

6550 - 6570 Salt, clear to light orange; little salt, mottled w/streaks gray anhydrite; trace black shale; trace gray, sugary, dolomitic anhydrite.

6570 - 6580 Salt, clear and little slightly orange; trace black carbonaceous shale; small amount of clear salt is mottled w/gray anhydrite; trace gray to gray-green sugary, dolomitic anhydrite.

6580 - 6600 Salt, as above; some gray and white, soft, gummy anhydrite; trace black carbonaceous shale.

6600 - 6606 Salt, as above; trace anhydrite, as above; trace black shale, as above.

	Pump pressure	Weight	RPM
6420-6473	900	40,000	80
6473-6480	900	50,000	80
6480-6606	1100	40,000	80

	Mud weight	Viscosity
At 6420'	13.4	57
6448'	13.2	58
6477'	13.2	55
6500'	13.9	51
6529'	13.7	51
6558'	13.4	55

Core #4, 6606-6664, cut 58', recovered 55'.

6606 - 6607 Salt, clear, medium crystalline.

6607 - 6608 As above, w/some light brown-black salt, color due to grey shaley anhydrite inclusions and disseminations.

6608 - 6609 Salt, clear, medium crystalline.

6609 - 6610 Salt, as above; w/some light-brown-black salt, color caused by grey shaley anhydrite inclusions and disseminations.

6610 - 6611 As above; w/black shale break, very slightly dolomitic, fissile.

Core #4 (con't)

6611 - 6612 Salt, as above.

6612 - 6613 Salt, as above; w/little anhydrite, black, waxy; shale, very anhydritic.

6613 - 6614 Salt, clear; some grey, anhydritic salt.

6614 - 6615 As above; w/little black shale partings.

6615 - 6616 As above; w/some anhydritic salt.

6616 - 6617 As above; w/little black shale.

6617 - 6618 Salt, as above.

6618 - 6619 As above.

6619 - 6620 As above; w/little black shale.

6620 - 6621 As above.

6621 - 6623 Salt, clear, medium crystalline.

6623 - 6624 As above; w/trace anhydrite in salt.

6624 - 6625 As above; w/little black shale partings.

6625 - 6626 Salt, clear, medium to fine crystalline.

6626 - 6627 As above, and little black shale.

6627 - 6628 Salt, clear, coarsely crystalline; some gray, shaley anhydrite.

6628 - 6629 As above; w/little black shale partings.

6629 - 6630 As above; no shale.

6630 - 6631 Salt, clear, medium crystalline.

6631 - 6632 As above, medium to coarse crystalline.

6632 - 6633 As above.

6633 - 6634 As above; w/trace pinpoints gray-black anhydrite.

6634 - 6636 As above.

6636 - 6637 Salt, clear, medium to coarse crystalline.

6637 - 6638 As above; w/some black shale blebs.

6638 - 6639 Salt, clear, medium to coarse crystalline, w/black shaley anhydrite inclusions.

6639 - 6640 Salt, clear, w/little black anhydritic shale partings.

6640 - 6642 As above.

6642 - 6645 Salt, clear, medium crystalline.

6645 - 6646 As above, and salt, light black w/shaley anhydrite inclusions.

6646 - 6647 Salt, clear, medium crystalline.

6647 - 6648 As above; w/little black anhydrite inclusions.

6648 - 6649 Salt, clear, coarse crystalline.

6649 - 6650 Salt, clear, medium crystalline; some dark anhydritic salt.

6650 - 6651 As above, coarse crystalline.

6651 - 6652 Salt, clear, coarse crystalline.

6652 - 6653 As above, medium crystalline.

6653 - 6654 Salt, clear; gray, anhydritic salt; little black shale partings.

6654 - 6655 Salt, clear, medium crystalline.

6655 - 6656 As above; w/some gray, anhydritic salt.

6656 - 6657 As above, coarse crystalline.

6657 - 6659 As above.

6659 - 6660 Same as above.

6660 - 6661 Salt, clear, medium to coarse crystalline.

6661 - 6664 No core recovery.

	Pump pressure	Weight	RPM
6608-6664	800	15,000	60

At 6664' - Mud weight 13.9, Vis 70.

Core #5, 6664-6722', cut 58', recovered 28'.

6664 - 6665 Shale, dark gray, anhydritic, slight odor on fracture break, clear salt inclusions, and salt, clear, medium crystalline.

Core #5 (con't)

6665 - 6667 Salt, clear, coarse crystalline; some gray, anhydritic salt, slightly shaley anhydrite partings.

6667 - 6668 As above; no shaley anhydrite.

6668 - 6669 Salt, clear, medium crystalline.

6669 - 6670 As above, and gray anhydritic salt.

6670 - 6671 As above; w/trace black shale.

6671 - 6672 Salt, clear, medium crystalline.

6672 - 6674 As above, medium to coarse crystalline.

6674 - 6679 No recovery.

6679 - 6680 Salt, clear, medium crystalline, and anhydrite, gray, salt.

6680 - 6681 As above; little gray, shaley anhydrite.

6681 - 6682 Salt, clear, medium crystalline.

6682 - 6684 As above, w/slight anhydrite inclusions in salt.

6684 - 6686 As above; anhydrite inclusions increasing.

6686 - 6687 As above.

6687 - 6688 Salt, clear, coarse crystalline.

6688 - 6691 As above.

6691 - 6699 No recovery.

6699 - 6701 Salt, clear, medium to coarse crystalline.

6701 - 6702 Salt, clear, w/gray appearance due to gray anhydrite inclusions and impurities.

6702 - 6704 Salt, clear, coarse crystalline.

6704 - 6705 As above, w/slight amount of anhydrite inclusions.

6705 - 6722 No recovery.

	Pump pressure	Weight	RPM
6664-6722	800	15,000	60

NOTE: Zones of no recovery based on drilling time and appearance of core.

Core #6, 6722-6752', cut 10', recovered 0'.

6722 - 6752 No recovery.

Drilling w/7-7/8" OSC1G (used bit).

6752 - 6740 Salt, clear; trace black carbonaceous shale; trace gray, sugary, dolomitic anhydrite; trace white, soft gypsum; slight amount of salt.

Circulation sample @ 6740' - 30" - Salt, clear; trace black carbonaceous shale; trace gray, sugary, dolomitic anhydrite; trace white, soft gypsum; slight amount of salt.
Circulation sample @ 6740' - 60" - Salt, clear; trace black carbonaceous shale; trace gray, sugary, dolomitic anhydrite; trace white, soft gypsum; slight amount of salt.
Circulation sample @ 6740' - 90" - Salt, clear; trace black carbonaceous shale; trace gray, sugary, dolomitic anhydrite; trace white, soft gypsum; slight amount of salt.
Circulation sample @ 6740' -120" - Salt, clear; trace black carbonaceous shale; trace gray, sugary, dolomitic anhydrite; trace white, soft gypsum; slight amount of salt.

	Pump pressure	Weight	RPM
6722-6752	800	15,000	60
6752-6740	1000	18,000	80

6722-6752' - Mud weight 15.8, Vis. 74.
6752-6740' - Mud weight 14.5, Vis. 101.

NOTE: When core #6 was out of the hole, mud started to blow out into the pits. Mud weight was 15.8 at that time. The blowout preventer valve was closed and weight material was added to mud. Mud appeared to be gas cut, so sample of mud was taken and analyzed at Hycolog Unit with no results except trace CO_2. This was same as mud samples taken during Core #4 and #5.

DST #3, 6668-6740', Paradox formation. Tool open 90 minutes, shut in 30 minutes. Very very weak blow air, died after 80 minutes. Recovered 20' drilling mud. Temperature survey 75°. IFP 20, FFP 20, SIP 20/30", IHH 3080, FHH 3025.

6740 - 6760 Salt, clear; trace brown to gray dolomitic anhydrite; trace black carbonaceous shale.

6760 - 6770 Anhydrite, gray, soft, gummy and brown, sugary; some black to gray shale; some clear salt.

6770 - 6780 Salt, clear; little white, soft anhydrite; trace black shale.

6780 - 6790 Salt, clear, w/slightly orange salt; trace gray dolomitic anhydrite; trace black shale.

6790 - 6810 As above; anhydrite decreasing.

6810 - 6870 Salt, clear, w/slightly orange salt; trace black shale.

6870 - 6890 Salt, clear to white; trace black shale.

6890 - 6910 Salt, clear to white, slightly anhydritic (inclusions); trace black carbonaceous shale.

6910 - 6920 No sample.

6920 - 6980 As above.

6980 - 6990 As above; trace brown, sugary, calcareous, shaley anhydrite.

6990 - 6990 Salt, clear.

6990 - 7010 Salt, clear; trace sugary, calcareous anhydrite.

7010 - 7040 Salt, clear; trace black shale.

7040 - 7060 Salt, clear.

7060 - 7100 As above; trace black, carbonaceous shale.

	Pump pressure	Weight	RPM
6740-6812	1000	45,000	80
6812-6953	1100	45,000	80
6953-7059	1100	45,000	80
7059-7100	1100	45,000	78

	Mud weight	Viscosity
At 6780'	14.8	80
6800'	15.8	69
6880'	15.7	67
6953'	15.6	80
6970'	15.6	65
7065'	15.9	70

7100 - 7110 Salt, clear.

7110 - 7120 Anhydrite, white and gray, soft, gummy, slightly dolomitic; some clear salt; trace black shale.

7120 - 7130 As above, salt increasing.

7130 - 7140 Anhydrite, white to gray, soft, gummy; some black carbonaceous shale; some salt.

7140 - 7150 Black shale, carbonaceous; some white to gray gummy anhydrite; little clear to orange salt.

7150 - 7160 As above; anhydrite increasing.

7160 - 7190 Anhydrite, white, soft, gummy; little black shale; little clear salt.

7190 - 7200 Salt, clear; w/some anhydrite and shale, as above.

7200 - 7210 Salt, clear; trace black shale.

7210 - 7220 As above; w/slight amount light brown salt.

7220 - 7230 As above; trace gray anhydrite.

7230 - 7240 Salt, clear; trace black shale.

7240 - 7250 As above.

7250 - 7260 Salt, clear; trace gray, dolomitic anhydrite.

7260 - 7270 As abpve; w/trace black shale.

7270 - 7300 Salt, clear; trace black shale.

	Pump pressure	Weight	RPM
7100-7157	1100	48,000	60 to 80
7157-7190	700	48,000	45
7190-7300	700	50,000	60

NOTE: Pump pressure dropped when clutch broke on one of the engines.

	Mud weight	Viscosity
At 7162'	13.2	66
7165'	13.5	61
7190'	13.4	54

7300 - 7360 Salt, white to clear; trace black carbonaceous shale.

7360 - 7370 As above; shale increasing to little; trace very slightly dolomitic, sugary, dark brown anhydrite.

7370 - 7380 Salt, as above; some white, soft gummy anhydrite (gypsum); trace black carbonaceous shale.

	Pump pressure	Weight	RPM
7300-7368	700	50,000	60
7368-7380	750	50,000	60

	Mud weight	Viscosity
At 7586'	13.5	61
7577'	13.5	61
7580'	13.3	65

7580 - 7590 Anhydrite, white, soft, gummy and gray, sucrosic; some salt, clear; little black carbonaceous shale.

7590 - 7400 Anhydrite, as above; little salt; some black carbonaceous shale.

7400 - 7410 Shale, black, carbonaceous, slightly dolomitic, fissile; some clear salt; little gray to white anhydrite.

7410 - 7420 Salt, clear and light orange; little black pyritic shale; little gray and white anhydrite.

7420 - 7440 Salt, as above, orange salt decreasing; little black shale; trace gray anhydrite.

7440 - 7480 As above; trace black shale.

7480 - 7490 Salt, clear; trace black carbonaceous shale.

7490 - 7500 As above; w/trace gray anhydrite.

7500 - 7510 As above; w/trace very light pink salt.

7510 - 7520 As above; w/little orange salt.

7520 - 7530 Salt, clear; w/little orange salt and shale, black, carbonaceous, calcareous, fissile; trace grey, sugary anhydrite.

7530 - 7540 Salt, clear, w/trace orange salt, and shale, black, carbonaceous, calcareous, fissile; trace grey, sugary, dolomitic, anhydritic shale.

7540 - 7550 As above; black shale increasing; salt decreasing.

	Pump pressure	Weight	RPM
7580-7488	1100	50,000	60
7488-7527	1100	50,000	60
7527-7550	900	30/50,000	75

	Mud weight	Viscosity
At 7584'	13.1	58
7420'	13.1	61
7510'	13.3	59
7534'	12.7	65
7540'	12.7	59

7550 - 7560 Shale, black, dark gray, dolomitic, carbonaceous, anhydritic in parts and salt, white (salt may be from up the hole).

At 7550' Mud weight 15.0, Viscosity 59.
7560' " " 15.1, Viscosity 58.

7560 - 7570 As above; increase ? salt.

7570 - 7580 As above; trace shale, red, calcareous.

	Pump pressure	Weight	RPM
7550-7574	1100	60,000	60
7574-7576	1000	65,000	60
7576-7580	1000	50,000	70

7580 - 7590 Shale, dark gray to black, dolomitic, carbonaceous, anhydritic grading to anhydrite, gray to white, fine granular (some salt in sample — from above?).

7590 - 7600 As above; increase anhydrite.

7600 - 7610 As above; decrease anhydrite.

7610 - 7620 As above.

7620 - 7650 As above; increase anhydrite.

	Mud weight	Viscosity
At 7586'	15.1	61
7599'	15.1	58
7614'	15.1	55
7620'	15.0	56

7650 - 7640 Shale, dark gray to black, dolomitic, anhydritic grading to anhydrite, grey to white, fine granular and dolomite, gray, tan, slightly anhydritic.

	Pump pressure	Weight	RPM
7580-7585	1000	50,000	70
7585-7624	1100	60,000	60
7624-7640	1000	60,000	60

7640 - 7650 Shale, dark gray to black, dolomitic, anhydritic grading to anhydrite, white to gray, fine granular; little dolomite, gray, tan, slightly anhydritic.

7650 - 7660 Anhydrite, white to grey (makes sample very gummy), sample also contains little shale and dolomite, as above.

7660 - 7670 Anhydrite, grey to white, grading to some shale, dark gray to black, dolomitic, anhydritic and little dolomite, as above.

	Mud weight	Viscosity
At 7645'	15.0	58
7659'	13.1	60
7663'	12.7	54

7670 - 7675 Shale, dark gray to black, dolomitic, anhydritic grading to anhydrite, white to gray; trace dolomite, as above.

7675 - 7680 Shale (looks silty - silt is anhydrite?), gray, dolomitic, anhydritic grading to interlaminae of anhydrite, gray to white, fine granular, dolomitic, some of sample may be dolomitic enough to call dolomite.

	Pump pressure	Weight	RPM
7640-7644	1000	60,000	60
7644-7666	1100	60,000	60
7666-7690	1000	55,000	60

7680 - 7685 Shale, dark gray to black, dolomitic, anhydritic grading to anhydrite, gray to white, dolomitic; trace gray, brown dolomite, anhydritic.

7685 - 7690 As above; w/more dolomite, gray, brown, granular, anhydritic, w/trace spotted fluorescence and cut in dolomite, 5% of sample.

7690 - 7695 Shale, as above; w/some dolomite, medium to dark gray, fine crystalline, tite, slightly anhydritic, slightly argillaceous, no show.

7695 - 7700 Dolomite, gray to dark gray, fine crystalline, argillaceous, some silty; w/little shale, black dolomite, trace very spotty fluorescence in dolomite.

7700 - 7704 As above; w/trace shale, black as above; w/trace shale, red, very calcareous, silty, w/trace rounded floating quartz grain, slightly pink to red.

Top Mississippian @ 7705'.

Core #7, 7704-7752', cut 48', recovered 48'.

7704 - 7705 Shale, black, poker chip, pyritic, very slightly dolomitic.

7705 - 7707 Dolomite, gray, fine crystalline, dense, pyritic.

7707 - 7708 Shale, gray to black, slightly dolomitic.

7708 - 7709 As above, w/stringers and inclusions of anhydrite, gray.

7709 - 7715 Dolomite, gray, fine crystalline, dense w/inclusions of anhydrite up to 1".

At 7710' Mud weight 12.5, Viscosity 48.

7715 - 7721 Limestone, gray-brown, fine to medium crystalline w/strong H_2S odor, bleeding oil, spotty light blue-green fluorescence.

At 7717' Mud weight 12.7, Viscosity 51.

7721 - 7722 As above, w/parting of shale, gray, pyritic 7721.5'.

7722 - 7725 Top 6" limestone, as above, lower 6" limestone, tan, mottled pink and gray, bleeding oil from random hairline fractures (has brecciated appearance); green slickensides @ 7722.5'.

7725 - 7728 Limestone, tan, mottled pink and gray, bleeding oil from random hairline fracture (has fragmental appearance), fluoresces light blue-green along fractures.

7728 - 7729 As above, w/several large vugs containing oil and black residue (sulfide?).

7729 - 7732 Limestone, as above, bleeding oil from random hairline fractures (looks fragmental); fluorescence, as above.

7732 - 7734 As above; fewer fractures, less bleeding oil; less H_2S odor.

At 7733' Mud weight 12.7, Viscosity 50.

7734 - 7745 Limestone, tan, mottled pink and gray, bleeding oil from a few random hairline fractures (looks fragmental); fluorescence light blue-green along fractures.

7745 - 7745 Limestone, gray to gray-black w/green slickensides @ 7744' (core broken up @ 7744').

At 7744' Mud weight 12.6, Viscosity 50.

7745 - 7747 Limestone, gray, fine crystalline w/few random hairline fractures (no apparent bleeding oil).

7747 - 7748 Limestone, tan to gray and dark gray w/random hairline fractures bleeding oil.

7748 - 7749 As above, w/2 vugs up to ½" becoming more brecciated in appearance.

7749 - 7752 Limestone, tan to gray and dark gray w/random hairline fractures bleeding oil (less than above).

At 7752' Mud weight 12.6, Viscosity 50.

	Pump pressure	Weight	RPM
7704-7710	700	17,000	59
7710-7717	700	19,000	58
7717-7752	700	20,000	58

Core #7 (Generalised Description), 7704-7752, cut 48', recovered 48'.
1' shale, black.
2' dolomite, gray.
2' shale, gray to black, dolomitic.
6' dolomite, gray w/anhydrite inclusions.
2' limestone, gray-brown, fine to medium crystalline.
5½' limestone, as above, bleeding oil and w/strong H_2S odor.
20½' limestone, tan, mottled pink and gray w/brecciated appearance w/ numerous random hairline fractures bleeding oil (less bleeding oil and H_2S odor 7752-45).

Core #7 (Generalized Description) con't
9' limestone, gray to gray-black, w/a few random hairline fractures, bleeding oil.

DST #4, 7714-7752', Mississippian formation. Tool open 1 hour, 30 minutes, shut in 30 minutes, fairly strong blow air immediately through ½" hose from bottom of 5 gallon bucket continued throughout test. Recovered 50' slightly gas and very slightly oil cut drilling fluid. IFP 20, FFP 20, ISIP 300/30", FSIP 100/30", IHP 5285, FHP 5260.

Core #8, 7752-7810', cut 58', recovered 58'.

7752 - 7755 Limestone, gray, mottled light gray and tan (looks brecciated), fine to medium crystalline, dense w/random hairline fractures and few small vugs bleeding oil (fluoresces light blue on fractures).

At 7754' Mud weight 12.6, Viscosity 50.

7755 - 7756 As above; 1/16" fracture.

7756 - 7760 As above.

At 7758' Mud weight 12.4, Viscosity 47.

7760 - 7763 Limestone, as above, w/very few fractures, no vugs, no bleeding oil (little light blue fluorescence on fractures).

7763 - 7764 Limestone, gray, mottled light gray and tan (looks brecciated), fine to medium crystalline, dense w/numerous random fractures and a few tiny vugs bleeding oil (fluoresces light blue on fractures).

7764 - 7765 As above; 1/8" vertical fracture through entire foot.

At 7765' Mud weight 12.5, Viscosity 48.

7765 - 7773 As above.

At 7771' Mud weight 12.7, Viscosity 49.

7773 - 7775 As above; 7773½-75½' has fractures up to ¼" lined w/calcite crystals.

7775 - 7779 As above; numerous 1/16" fractures.

At 7775' Mud weight 12.6, Viscosity 50.

7779 - 7780 As above; so highly fractured that pieces had to be gathered up in a bucket.

7780 - 7781 As above; highly fractured as in foot above.

7781 - 7782 As above; fractures and vugs have black residue.

7782 - 7785 Limestone, gray, mottled light gray and tan (looks brecciated), fine to medium crystalline, dense w/numerous random fractures and a few small vugs bleeding oil (fluoresces light blue on fractures).

At 7782'. Mud weight 12.6, Viscosity 50.

7785 - 7786 As above; not bleeding oil.

7786 - 7787 As above; not bleeding oil; slickensides, green @ 7786'.

7787 - 7790 As above; badly fractured; bleeding oil.

At 7787' Mud weight 12.6, Viscosity 50.

7790 - 7792 As above, but w/fewer fractures than in 3' above.

At 7791' Mud weight 12.6, Viscosity 55.

7792 - 7795 As above; black residue in vugs.

7795 - 7794 As above; 1/4" fracture.

7794 - 7796 As above.

7796 - 7798 As above; 1/4" fracture 7796-7797½ (vertical).

7798 - 7803 As above; 1/16" fracture 7798½-7799'.

At 7799' Mud weight 12.6, Viscosity 53.

7803 - 7805 As above; more distinctly brecciated; less bleeding oil than above 7803-05'.

At 7805' Mud weight 12.6, Viscosity 49.

7805 - 7810 As above; 7805-7810' so highly fractured that pieces of core had to be gathered up in a bucket.

	Pump pressure	Weight	RPM
7752-7758	650	20,000	52
7758-7771	650	22,000	52
7771-7782	600	25,000	52
7782-7810	650	25,000	52

Core #8 (Generalised Description), 7752-7810', cut 58', recovered 58'.
8' limestone, gray, mottled light gray and tan w/numerous random fractures and a few small vugs bleeding oil.
5' limestone, as above, w/very few fractures and no vugs, no bleeding oil.
22' limestone, as above w/numerous random fractures and a few small vugs bleeding oil.
2' limestone, as above, not bleeding oil.
23' limestone, as above, bleeding oil.

DST #5, 7755-7810', Mississippian formation. Tool open 2 hours, shut in 30 minutes, weak blow air immediately increasing to strong after 2 minutes and continuing throughout; gas (inflammable) w/H_2S odor to surface 35 minutes (est. 35-50 MCF) and throughout. Recovered 920' gas cut light green oil (like oil in Big Flat Unit #1), 1410' gas cut light green oil with some dark green emulsion (possibly drilling fluid). IFP 200, FFP 775, ISIP 2600/30", FSIP 2600/30", IHH 5050, FHH 5000.

T.D. 7810'.

THE PURE OIL COMPANY

GENERAL OFFICES, 35 EAST WACKER DRIVE, CHICAGO.

ROCKY MOUNTAIN PRODUCING DIVISION
1700 BROADWAY
DENVER 2, COLORADO

October 2, 1958

Mr. Cleon B. Feight, Secretary
Utah Oil & Gas Conservation Commission
Room 310 - Newhouse Building
Salt Lake City, Utah

Dear Mr. Feight:

Enclosed are the following records pertaining to Pure-Big Flat Unit No. 2, Section 14-26S-19E, Grand County, Utah:

1. One copy, Form 9-330, Log of Oil or Gas Well.

2. One copy, McCullough Radiation Log.

3. One copy, Geological Sample Log.

Yours very truly,

T. L. Warburton
Division Chief Production Clerk

TLW:dek

Enclosures

24F
G2

CR 76064

Form 9-331a
(Feb. 1951)

Copy H. L. C.

(SUBMIT IN TRIPLICATE)

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

Land Office Salt Lake City
Lease No. SLC 067043
Unit Big Flat

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			
Notice of Intention to Rework	X		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

August 14, 1962

Pure-Big Flat Unit
Well No. 2 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 14

SW¼ NE¼ Sec. 14 (¼ Sec. and Sec. No.) | 26S (Twp.) | 19E (Range) | Salt Lake (Meridian)

Big Flat (Field) | Grand (County or Subdivision) | Utah (State or Territory)

The elevation of the ground above sea level is 6103 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

SEE SUPPLEMENTAL SHEET ATTACHED

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company THE PURE OIL COMPANY

Address P. O. Box 1338

Moab, Utah

253-3581

By ORIGINAL SIGNED W. W. WEIR
W. W. Weir

Title District Superintendent

GPO 862040

Salt Lake City
SLC 067043
Big Flat

Notice of Intention to Temporarily Abandon Well

Pure-Big Flat Unit No. 2
1980' FNL and 1980' FEL
SW NE Sec. 14, T26S, R19E
Grand County, Utah

R & R Well Service Co. moved workover rig on well and pulled 5" hot oil string from well. Ran neutron and collar correlation log from 7,710' to 7,300'. Dropped bridge plug bomb to seal bore of packer set at 7,726'. Spotted two sacks of cement on plug from 7,726' to 7,716'. Ran 2-1/2" tubing to 7,508'.

Perforated from 7,570' to 7,600' with two (2) jet shots per foot and from 7,600' to 7,620' with four (4) jet shots per foot. Swabbed water left in hole down to 6,300'. Left well shut in over night. Ran swab. Found top of fluid at 2,000'. Fluid consisted of 11 lb. black salt water. Swabbed well down to 6,800'.

Halliburton acidized with 2,000 gallons MCA 10%. Spotted acid on formation. Let soak for 20 minutes. Pressured to 3700#. Formation broke. Increased injection rate from 1-1/2 to 4 barrels per minute to increase pressure to 4400#. Flushed with 44 barrels fresh water, no overflush. Immediate shut in 3600#. Bled down to 3500# in 20 minutes. Two hour shut in 600#. Opened well to pit and bled to zero immediately. Swabbed well down to 7,300'. Recovered acid water and salt water, no oil or gas.

Will pull tubing from well, install Xmas tree and temporarily abandon.

Form 9-331a
(Feb. 1951)

Copy H. L. C.

(SUBMIT IN TRIPLICATE)

Budget Bureau No. 42-R358.4.
Approval expires 12-31-60.

Land Office Salt Lake City

Lease No. SLC 067043

Unit Big Flat

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL Temporarily	X		

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

October 4, 19 62

Pure-Big Flat Unit
Well No. 2 is located 1980 ft. from {N/S} line and 1930 ft. from {E/W} line of sec. 14

SW¼ NE¼ Sec. 14 (¼ Sec. and Sec. No.) | 26S (Twp.) | 19E (Range) | Salt Lake (Meridian)

Big Flat (Field) | Grand (County or Subdivision) | Utah (State or Territory)

The elevation of the ~~derrick floor~~ ground above sea level is 6103 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

SEE SUPPLEMENTAL SHEET ATTACHED

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company THE PURE OIL COMPANY

Address P. O. Box 1338

Moab, Utah

253-3581

By J. B. Strong
J. B. Strong

Title Senior District Clerk

GPO 862040

Copy H.L.C.

Form 9-331a
(Feb. 1951)

Budget Bureau No. 42-R358.4.
Form Approved.

(SUBMIT IN TRIPLICATE)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Salt Lake City
Lease No. SLC 067043
Unit Big Flat

SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL		SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF Temporary ABANDONMENT	X
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

October 5, 1962

Pure-Big Flat Unit
Well No. 2 is located 1980 ft. from {N/S} line and 1980 ft. from {E/W} line of sec. 14

SW¼ NE¼ Sec. 14 (¼ Sec. and Sec. No.) | 26S (Twp.) | 19E (Range) | Salt Lake (Meridian)

Big Flat (Field) | Grand (County or Subdivision) | Utah (State or Territory)

The elevation of the ~~derrick floor~~ ground above sea level is 6103 ft.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

10-3-62 Pulled tubing from well, installed Xmas tree and temporarily abandoned October 3, 1962.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company THE PURE OIL COMPANY

Address P. O. Box 1338

Moab, Utah

253-3581

By J. B. Strong

Title Senior District Clerk

GPO 914974

CORRECTED COPY

Form approved
Budget Bureau No. 42-R358.4.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Land Office Salt Lake City
Lease Number See Below
Unit Big Flat

LESSEE'S MONTHLY REPORT OF OPERATIONS

State Utah County Grand Field Big Flat

The following is a correct report of operations and production (including drilling and producing wells) for the month of October, 19 62

Agent's address P. O. Box 1338 Company THE PURE OIL COMPANY

Moab, Utah Signed L. K. Cozzens

Phone 253-3581 Agent's title District Office Manager

Sec. & ¼ of ¼	Twp.	Range	Well No.	Days Produced	Bbls. of Oil	Gravity	Cu. Ft. of Gas (In Thous.)	Gal. of Gasoline Recovered	Bbls. of Water (If none, state	REMARKS (If drilling, depth; if shut down cause; date and result of test for gasoline content of gas)
HEADVILLE PARTICIPATING AREA										
C SW¼SE¼ Sec. 14 Big Flat Unit No. 1	26S	19E	1	-0-	-0-	-	-0-	-	None	Shut down entire month.
SW¼NE¼ Sec. 14 Big Flat Unit No. 2	26S	19E	2	-0-	-0-	-	-0-	-	None	On September 27, 1962 R & R Well Service Co. moved workover rig on well and pulled 5" hot oil string from well. Ran neutron and collar correlation log from 7,710' to 7,300'. Dropped bridge plug bomb to seal bore of packer set at 7,726'. Spotted two sacks of cement on plug from 7,726' to 7,716'. Ran 2-1/2" tubing to 7,503'. Perforated from 7,570' to 7,600' with two (2) jet shots per foot and from 7,600' to 7,620' with four (4) jet shots per foot. Swabbed water left in hole down to 6,300'. Left well shut in over night. Ran swab. Found top of fluid at 2,000'. Fluid consisted of 11 lb. black salt water. Swabbed well down to 6,800'. Halliburton acidized with 2,000 gallons MCA, 10%. Spotted acid on formation. Let soak for 20 minutes. Pressured to 3700#. Formation broke. Increased injection rate from 1-1/2 to 4 barrels per minute to increase pressure to 4400#. Flushed with 44 bbls. of fresh water, no overflush. Immediate shut in 3600#. Bled down to 3500# in 20 minutes. Two hour shut in 600#. Opened well to pit and bled to zero immediately. Swabbed well down to 7,300'. Recovered acid water and salt water, no oil or gas. On October 3, 1962, pulled tubing from well, installed Xmas tree and temporarily abandoned.
NE¼NE¼ Sec. 23 Big Flat Unit No. 3	26S	19E	3	31	869	43.2	685	-	80%	Pumping.

Note—There were 3,767.18 bbls runs or sales of oil; No M cu. ft. of gas sold;

No runs or sales of gasoline during the month. (Write "no" where applicable.)

Note—Report on this form is required for each calendar month, regardless of the status of operations, and must be filed in duplicate with the supervisor by the 6th of the succeeding month, unless otherwise directed by the supervisor.

Form 9-329
(January 1950)

January 23, 1963

Pure Oil Company
P. O. Box 1338
Moab, Utah

Attention: J. B. Strong, Senior District Clerk

Re: Well No. Pure-Big Flat Unit #2
Sec. 14, T. 26 S, R. 19 E.,
Grand County, Utah

Gentlemen:

This letter is to advise you that the well log for the rework of the above mentioned well is due and has not been filed with this office as required by our rules and regulations.

Please complete the enclosed Form OGCC-3, "Log of Oil or Gas Well", in duplicate and forward them to this office as soon as possible. Legible copies of the U. S. Geological Survey Form 9-330 may be used in lieu of our forms.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

CONNIE F. PALOUKOS
RECORDS CLERK

CFP:cnp

Encl. (Forms)

February 19, 1963

Pure Oil Company
P. O. Box 1338
Moab, Utah

Re: Well No. Pure-Big Flat Unit #2
Sec. 14, T. 26 S, R. 19 E.,
Grand County, Utah

Gentlemen:

Upon checking our file for the above mentioned well, we note that the date of which this well was temporarily abandoned was omitted from your report of October 4, 1962.

Would you please furnish us with this information, in order that we may complete our file.

Thank you for your cooperation in this matter.

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

CONNIE F. PALOUKOS
RECORDS CLERK

CFP:cnp

Form 9-331
(May 1963)

RECEIVED
BR. OF OIL & GAS OPERATIONS
MAY 19 1966
U.S. GEOLOGICAL SURVEY
SALT LAKE CITY, UTAH

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

OIL WELL ☒ GAS WELL ☐ OTHER

5. LEASE DESIGNATION AND SERIAL NO.: Salt Lake 066113

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME: Big Flat

2. NAME OF OPERATOR: King Oil Company, et al

8. FARM OR LEASE NAME:

3. ADDRESS OF OPERATOR: 68 South Main, Suite 506, Salt Lake City, Utah

9. WELL NO.: (Big Flat) #1 Ruby (Unit #2)

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface: 340' FSL & 1369' FEL

10. FIELD AND POOL, OR WILDCAT: Big Flat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 11, T26S, R19E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 6157' KB, 6146' GL

12. COUNTY OR PARISH: Grand

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	XX
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Subject well plugged and abandoned as described in attached letter and as shown on Notice of Intention to Abandon received and orally approved 8-3-56.

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] for TITLE King Oil Company DATE May 16, 1966

(This space for Federal or State office use)

APPROVED BY [signature] TITLE ACTING DISTRICT ENGINEER DATE MAR 30 1966

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

United States Department of the Interior

OFFICE OF THE SOLICITOR
SUITE 6201, FEDERAL BUILDING
125 SOUTH STATE STREET
SALT LAKE CITY, UTAH 84138

February 26, 1980

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

King Oil Company
Attention: Mr. Bocell
c/o Energy Resources Oil & Gas Corp.
2735 Villa Creek Drive, Suite 165
Dallas, Texas 75234

Re: Wells Nos. 1 and 1A, Sec. 11, T. 26 S., R. 19 E., Grand County, Utah, Lease No. SL-066103

Wells Nos. 1, 2, and 3, Secs. 14 and 23, T. 26 S., R. 19 E., Grand County, Utah, Lease No. SL-067043

Gentlemen:

This is to advise you that in response to a request from the U. S. Geological Survey, we are hereby issuing a formal demand that the above-referenced abandoned locations be properly plugged and restored. Numerous letters on this matter have been directed to your company, its surety, and its legal counsel by U.S.G.S. since 1972. To date, there has been no response assuring results.

Your company's failure to live up to the terms of the now terminated leases makes this formal demand necessary. Geological Survey has been more than patient in its attempts to have these plugging and restoration obligations satisfied. Patience, however, has its limits, and we feel it imperative that we receive a response setting up a satisfactory schedule for the completion of this work. Failure to do so will result in the initiation of legal proceedings.

ENERGY RESOURCES OIL & GAS CORPORATION
a subsidiary of
Energy Resources Corporation
2735 VILLA CREEK DRIVE • SUITE 165 • DALLAS, TEXAS 75234 • (214) 241-2776

Routing:
(✓) Nielson
(✓) Robison
( ) McConkie
( ) Kelly
( ) Lind
( ) Smith
( ) McPhie
( ) Bailey
( ) _____
( ) _____
File

February 29, 1980

Mr. Roland G. Robison, Jr.
Assistant Regional Solicitor
U.S. Department of the Interior
Suite 6201 Federal Building
125 South State Street
Salt Lake City, Utah 84138

Re: Wells No. 1 and 1-A
Section 11, T-26-S, R-19-E
Grand County, Utah
Lease #SL-066103

Wells No. 1, 2, and 3
Sections 14 and 23, T-26-S, R-19-E
Grand County, Utah
Lease #SL-067043

Dear Mr. Robison:

We are in receipt of your letter of February 26, 1980, regarding the subject wells. As a result of a recent merger, Energy Resources Oil & Gas Corporation acquired the properties of King Oil Company without the knowledge of the location of old dry holes or abandoned wells. As a result ot our bonding company advising us that we had a problem with these wells, we did track down their whereabouts.

On February 11, 1980, I talked to Mr. Dee Dearth by telephone and he related the location and well site conditions. Mr. Dearth also provided us with considerable well data and records which we did not previously have. Further, Mr. Dearth advised us that the area was covered with snow and that it would be difficult to do any work until Spring.

It is our intention to comply with the department requirements as soon as feasibly possible. I plan a personal trip to the well sites to make arrangements to properly plug and abandon these wells. Thank you for your cooperation.

Sincerely,

Robert D. Bocell
Operations Manager

RDB/sc

If you have any questions concerning this matter, please feel free to contact us. We look forward to your response.

Very truly yours,

REID W. NIELSON
Regional Solicitor

By Roland G. Robison Jr.
ROLAND G. ROBISON, JR.
Assistant Regional Solicitor

/

cc: Dee Dearth, Geological Survey, 2000 Administration Bldg., 1745 West 1700 South, SLCU 84104
Siegfried Insurance, Attn: Peggy Borneman, P. O. Box 3308, Tulsa, OK 74101

2-27-80

Copies Sent To:

BLM, Moab
USGS, Vernal
USGS, Grd. Jct.
Well Files (5)

United States Department of the Interior

GEOLOGICAL SURVEY
Conservation Division
2000 Administration Building
1745 West 1700 South
Salt Lake City, Utah 84104

October 23, 1980

United States Department of the Interior
Office of the Solicitor
Suite 6201, Federal Building
125 South State Street
Salt Lake City, Utah 84138

Re: Well Nos. 1 and 1A, Section 11,
Township 26S, Range 19E
Grand County, Utah
Lease No. SL - 066103

Well Nos. 1, 2, and 3, Section 14
and 23, Township 26S, Range 19E
Grand County, Utah
Lease No. SL - 067043

Gentlemen:

Personnel from this office inspected the referenced locations on October 16, 1980. No progress has been made by Energy Resources Oil and Gas Corporation to comply with your demand letter dated February 26, 1980 (see attached letter).

According to Energy Resources Oil and Gas Corporation's reply letter dated February 29, 1980 (see letter attached) they proposed to comply with the Federal requirements as soon as feasibly possible.

Sufficient time has elapsed to complete this work; therefore, we feel further action will be necessary for compliance.

If additional information or assistance is required, please contact Dee Dearth at this office.

Sincerely yours,

(ORIG. SGD.) E. W. GUYNN

E. W. Guynn
District Oil and Gas Supervisor

* 910109 Bfm/Moab
Paid eff. 12-29-81 lp

Attachments

cc: BLM, Moab, Utah w/attachment
Utah State Oil and Gas w/attachment

RECEIVED
OCT 27 1980
DIVISION OF
OIL, GAS & MINING